

**Supplemental Table 1 Description of samples and classification**

Groups	Extraction method	Sample name	Family	Genus	Pharmaceutical effect	Library ID	Treat	data ID
Group1	S171	<i>Ageratina adenophora</i>	Asteraceae	Ageratina	Promoting blood circulation and removing stasis	A-549 71	Treat15	CL100120269_L01_87
Group1	S086	<i>Gynura procumbens</i>	Asteraceae	Gynura	Promoting blood circulation and removing stasis	A-549 52	Treat62	CL100144672_L02_68
Group1	S127	<i>Kadsura coccinea</i>	Schisandra ceae	Kadsura	Promoting blood circulation and removing stasis	A-549 63	Treat7	CL100120269_L01_79
Group1	W3	<i>Panax japonica</i> var major	Araliaceae	Panax	Promoting blood circulation and removing stasis	A-549 3	Treat69	CL100144714_L01_79
Group1	W1	<i>Panax notoginseng</i>	Araliaceae	Panax	Promoting blood circulation and removing stasis	A-549 1	Treat67	CL100144714_L01_77
Group1	W5	<i>Panax stipuleanatus</i>	Araliaceae	Panax	Promoting blood circulation and removing stasis	A-549 5	Treat71	CL100144714_L02_81
Group1	W4	<i>Panax vietnamensis</i>	Araliaceae	Panax	Promoting blood circulation and removing stasis	A-549 4	Treat70	CL100144714_L01_80
Group1	S083	<i>Phyllanthus reticulatus</i> Poir. var. glaberMuell.-Age.	Euphorbiaceae	Phyllanthus	Promoting blood circulation and removing stasis	A-549 49	Treat59	CL100144672_L02_65
Group1	GX0831	<i>Salvia miltiorrhiza</i>	Lamiaceae	Salvia	Promoting blood circulation and removing stasis	A-549 14	Treat80	CL100144714_L02_90
Group1	GX0824	<i>Smilax scobinicaulis</i> C. H. Wright	Liliaceae	Smilax	Promoting blood circulation and removing stasis	A-549 9	Treat75	CL100144714_L02_85
Group2	S048	<i>Abutilon indicum</i>	Malvaceae	Abutilon	Heat-Clearing	A-549 41	Treat51	CL100144672_L02_57
Group2	S071	<i>Amaranthus tricolor</i>	Amaranthaceae	Amaranthus	Heat-Clearing	A-549 47	Treat57	CL100144672_L02_63
Group2	S055	<i>Argyreia pierreana</i>	Convolvulaceae	Argyreia	Heat-Clearing	A-549 43	Treat53	CL100144672_L02_59
Group2	S059	<i>Artemisia lactiflora</i>	Asteraceae	Artemisia	Heat-Clearing	A-549 45	Treat55	CL100144672_L02_61

Group2	S109	<i>Chenopodium album</i>	Chenopodiaceae	Chenopodium	Heat-Clearing	A-549	57	Treat1	CL100120269_L01_73
Group2	S166	<i>Dalbergia pinnata</i>	Fabaceae	Dalbergia	Heat-Clearing	A-549	70	Treat14	CL100120269_L01_86
Group2	S044	<i>Euphorbia hirta</i>	Euphorbiaceae	Euphorbia	Heat-Clearing	A-549	39	Treat46	CL100144672_L01_47
Group2	GX0835	<i>Forsythia suspensa</i>	Oleaceae	Forsythia	Heat-Clearing	A-549	16	Treat82	CL100144714_L02_92
Group2	GX0850	<i>Kummerowia striata</i>	Fabaceae	Kummerowia	Heat-Clearing	A-549	26	Treat37	CL100144672_L01_102
Group2	S104	<i>Mallotus apelta</i>	eae	Mallotus	Heat-Clearing	A-549	56	Treat66	CL100144672_L02_72
Group2	S084	<i>Malva verticillata</i> var. <i>crispa</i>	Malvaceae	Malva	Heat-Clearing	A-549	50	Treat60	CL100144672_L02_66
Group2	S047	<i>Malvastrum coromandelianum</i>	Malvaceae	Malvastrum	Heat-Clearing	A-549	40	Treat47	CL100144672_L01_48
Group2	S125	<i>Melia azedarach</i>	Meliaceae	Melia	Heat-Clearing	A-549	62	Treat6	CL100120269_L01_78
Group2	GX0825	<i>Paeonia anomala</i> subsp. <i>veitchii</i>	Paeoniaceae	Paeonia	Heat-Clearing	A-549	10	Treat76	CL100144714_L02_86
Group2	S111	<i>Polygonum perfoliatum</i>	Polygonaceae	Polygonum	Heat-Clearing	A-549	58	Treat2	CL100120269_L01_74
Group2	GX0836	<i>Scutellaria baicalensis</i>	Lamiaceae	Scutellaria	Heat-Clearing	A-549	17	Treat83	CL100144714_L02_93
Group2	S095	<i>Senecio scandens</i>	Asteraceae	Senecio	Heat-Clearing	A-549	53	Treat63	CL100144672_L02_69
Group2	S004	<i>Sphagneticola calendulacea</i>	Asteraceae	Sphagneticola	Heat-Clearing	A-549	31	Treat89	CL100144736_L02_15
Group2	GX0842	<i>Swertia leducii</i>	Gentianaceae	Swertia	Heat-Clearing	A-549	21	Treat48	CL100144672_L01_97
Group2	S063	<i>Tabernaemontana divaricata</i>	Apocynaceae	Tabernaemontana	Heat-Clearing	A-549	46	Treat56	CL100144672_L02_62
Group3	S138	<i>Breynia fruticosa</i>	Euphorbiaceae	Breynia	Rheumatism treatment	A-549	64	Treat8	CL100120269_L01_80
Group3	S008	<i>Excoecaria cochinchinensis</i> Lour.	Euphorbiaceae	Excoecaria	Rheumatism treatment	A-549	32	Treat90	CL100144736_L02_16
Group3	S008	<i>Excoecaria cochinchinensis</i> Lour.	Euphorbiaceae	Excoecaria	Rheumatism treatment	A-549	32	Treat91	CL100144736_L02_41
Group3	S118	<i>Mucuna macrocarpa</i>	Fabaceae	Mucuna	Rheumatism treatment	A-549	60	Treat4	CL100120269_L01_76
Group3	GX0821	<i>Pinus massoniana</i> Lamb.	Pinaceae	Pinus	Rheumatism treatment	A-549	6	Treat72	CL100144714_L02_82
Group3	S165	<i>Trachelospermum jasminoides</i>	Apocynaceae	Trachelospermum	Rheumatism treatment	A-549	69	Treat13	CL100120269_L01_85
Group4	S029	<i>Blumea riparia</i>	Asteraceae	Blumea	Hemostatic	A-549	34	Treat41	CL100144672_L01_42
Group4	S034	<i>Chromolaena odorata</i>	Asteraceae	Chromolaena	Hemostatic	A-549	37	Treat44	CL100144672_L01_45

Group4	W8	<i>Panax zingiberensis</i> C. Y. Wu et K. M. Feng	Araliaceae	Panax	Hemostatic	A-549 154	Treat20	CL100120269_L 02_44
Group4	S103	<i>Phyllodium elegans</i>	Fabaceae	Phyllodium	Hemostatic	A-549	55 Treat65	CL100144672_L 02_71
Group4	S058	<i>Pteris semipinnata</i>	Pteridaceae	Pteris	Hemostatic	A-549	44 Treat54	CL100144672_L 02_60
Group4	S162	<i>Solanum erianthum</i>	Solanaceae	Solanum	Hemostatic	A-549	68 Treat12	CL100120269_L 01_84
Group5	GX0830	<i>Angelica sinensis</i>	Apiaceae	Angelica	Tonic	A-549	13 Treat79	CL100144714_L 02_89
Group5	GX0857	<i>Astragalus chinensis</i>	Fabaceae	Astragalus	Tonic	A-549	29 Treat87	CL100144736_L 02_13
Group5	GX0827	<i>Astragalus membranaceus</i>	Leguminosae	Astragalus	Tonic	A-549	12 Treat78	CL100144714_L 02_88
Group5	GX0841	<i>Chengiopanax fargesii</i>	Araliaceae	Chengiopanax	Tonic	A-549	20 Treat86	CL100144714_L 02_96
Group5	GX0839	<i>Cullen corylifolium</i>	Fabaceae	Cullen	Tonic	A-549	19 Treat85	CL100144714_L 02_95
Group5	GX0838	<i>Lycium chinense</i>	Solanaceae	Lycium	Tonic	A-549	18 Treat84	CL100144714_L 02_94
Group5	W2	<i>Panax ginseng</i> C. A. Meyer	Araliaceae	Panax	Tonic	A-549	2 Treat68	CL100144714_L 01_78
Group5	W6	<i>Panax japonicus</i> var. <i>angustifolius</i>	Araliaceae	Panax	Tonic	A-549 153	Treat19	CL100120269_L 02_43
Group5	W7	<i>Panax quinquefolium</i> Linn	Araliaceae	Panax	Tonic	A-549 152	Treat18	CL100120269_L 02_42
Group6	S052	<i>Acmella paniculata</i>	Asteraceae	Acmella	Rsthmatics, expectorants and antitussives	A-549	42 Treat52	CL100144672_L 02_58
Group6	S161	<i>Aristolochia tagala</i>	Aristolochiaceae	Aristolochia	Rsthmatics, expectorants and antitussives	A-549	67 Treat11	CL100120269_L 01_83
Group6	GX0847	<i>Crotalaria ferruginea</i>	Fabaceae	Crotalaria	Rsthmatics, expectorants and antitussives	A-549	24 Treat35	CL100144672_L 01_100
Group6	GX0822	<i>Inula japonica</i> Thunb.	Asteraceae	Inula	Rsthmatics, expectorants and antitussives	A-549	7 Treat73	CL100144714_L 02_83
Group7	GX0855	<i>Bischofia javanica</i>	Euphorbiaceae	Bischofia	Water- disinhibiting and damp-percolating	A-549	28 Treat39	CL100144672_L 01_104
Group7	S031	<i>Humulus scandens</i>	Cannabaceae	Humulus	Water- disinhibiting and damp-percolating	A-549	35 Treat42	CL100144672_L 01_43

Group7	GX0849	<i>Polygonum aviculare</i>	Polygonaceae	Polygonum	Water-disinhibiting and damp-percolating	A-549	25	Treat36	CL100144672_L01_101
Group8	S022	<i>Cyperus rotundus</i>	Cyperaceae	Cyperus	Qi-regulating	A-549	33	Treat40	CL100144672_L01_41
Group8	GX0826	Fruitlet of <i>Citrus aurantium</i> L.	Rutaceae	Citrus	Qi-regulating	A-549	11	Treat77	CL100144714_L02_87
Group8	GX0858	Immature fruit of <i>Citrus aurantium</i> L.	Rutaceae	Citrus	Qi-regulating	A-549	30	Treat88	CL100144736_L02_14
Group9	S120	<i>Entada phaseoloides</i>	Fabaceae	Entada	Heat-clearingastringen	A-549	61	Treat5	CL100120269_L01_77
Group9	S000	<i>Myristica fragrans</i>	Myristicaceae	Myristica	clearingastringen	A-549	73	Treat17	CL100120269_L02_41
Group9	GX0834	<i>Schisandra chinensis</i>	Schisandraceae	Schisandra	Heat-clearingastringen	A-549	15	Treat81	CL100144714_L02_91
Group10	S098	<i>Gelsemium elegans</i>	Loganiaceae	Gelsemium	Detoxifying, analgesia, antipruritic	A-549	54	Treat64	CL100144672_L02_70
Group10	S174	<i>Ricinus communis</i>	Euphorbiaceae	Ricinus	Detoxifying, analgesia, antipruritic	A-549	72	Treat16	CL100120269_L01_88
Group11	GX0823	<i>Arctium lappa</i>	Asteraceae	Arctium	Unclassified	A-549	8	Treat74	CL100144714_L02_84
Group11	S147	<i>Cornus macrophylla</i>	Cornaceae	Cornus	Unclassified	A-549	65	Treat9	CL100120269_L01_81
Group11	S040	<i>Glycosmis pentaphylla</i>	Rutaceae	Glycosmis	Unclassified	A-549	38	Treat45	CL100144672_L01_46
Group11	S085	<i>Ligustrum confusum</i>	Oleaceae	Ligustrum	Unclassified	A-549	51	Treat61	CL100144672_L02_67
Group11	S115	<i>Mallotus barbatus</i>	Euphorbiaceae	Mallotus	Unclassified	A-549	59	Treat3	CL100120269_L01_75
Group11	GX0854	<i>Platycodon grandiflorus</i>	Campanulaceae	Platycodon	Unclassified	A-549	27	Treat38	CL100144672_L01_103
Group11	S081	<i>Ricinus communis</i> L.	Euphorbiaceae	Ricinus	Unclassified	A-549	48	Treat58	CL100144672_L02_64
Group11	S033	<i>Sesbania bispinosa</i>	Fabaceae	Sesbania	Unclassified	A-549	36	Treat43	CL100144672_L01_44
Group11	S033	<i>Sesbania bispinosa</i>	Fabaceae	Sesbania	Unclassified	A-549	36	Treat92	CL100144736_L02_42
Group11	S155	<i>Solanum aculeatissimum</i>	Solanaceae	Solanum	Unclassified	A-549	66	Treat10	CL100120269_L01_82
Group11	GX0846	<i>Solanum melongena</i>	Solanaceae	Solanum	Unclassified	A-549	23	Treat50	CL100144672_L01_99
Group11	GX0844	<i>Zanthoxylum bungeanum</i> Maxim.	Rutaceae	Zanthoxylum	Unclassified	A-549	22	Treat49	CL100144672_L01_98
Group12	-	Cabozantinib	-	-	Positive controls	A-549	157	Treat34	CL100137964_L02_99

Group1 2	-	cis-Platinum 1	-	-	Positive controls	A-549 D1	Treat28	CL100137964_L 02_91
Group1 2	-	cis-Platinum 2	-	-	Positive controls	A-549 D2	Treat29	CL100137964_L 02_92
Group1 2	-	Docetaxel	-	-	Positive controls	A-549 160	Treat25	CL100137964_L 02_102
Group1 2	-	Doxorubicin hydrochloride	-	-	Positive controls	A-549 156	Treat33	CL100137964_L 02_98
Group1 2	-	Gefitinib	-	-	Positive controls	A-549 155	Treat32	CL100137964_L 02_97
Group1 2	-	Gemcitabine	-	-	Positive controls	A-549 158	Treat23	CL100137964_L 02_100
Group1 2	-	Lenvatinib	-	-	Positive controls	A-549 159	Treat24	CL100137964_L 02_101
Group1 2	-	Paclitaxel 1	-	-	Positive controls	A-549 T1	Treat30	CL100137964_L 02_93
Group1 2	-	Paclitaxel 2	-	-	Positive controls	A-549 T2	Treat31	CL100137964_L 02_94
Group1 2	-	Sorafenib	-	-	Positive controls	A-549 161-1	Treat26	CL100137964_L 02_103
Group1 2	-	Sorafenib	-	-	Positive controls	A-549 161-2	Treat27	CL100137964_L 02_104
Group1 2	-	Viborelbine	-	-	Positive controls	A-549 162- 1	Treat21	CL100125983_L 01_2
Group1 2	-	Viborelbine	-	-	Positive controls	A-549 162- 2	Treat22	CL100125983_L 01_3
Group1 3	-	Control 1	-	-	Negative controls	A-549 NC1	CK	CL100137964_L 02_89
Group1 3	-	Control 2	-	-	Negative controls	A-549 NC2	CK	CL100137964_L 02_90
Group1 3	-	Control 8	-	-	Negative controls	A-549 NC8	CK	CL100137964_L 02_95
Group1 3	-	Control 9	-	-	Negative controls	A-549 NC9	CK	CL100125983_L 01_1
Group1 4	W1	<i>Panax notoginseng</i>	Araliaceae	Panax	Promoting blood circulation and removing stasis	A-549 1	Treat67	CL100144714_L 01_77
Group1 4	GX0831	<i>Salvia miltiorrhiza</i>	Lamiaceae	Salvia	Promoting blood circulation and removing stasis	A-549 14	Treat80	CL100144714_L 02_90
Group1 4	S004	<i>Sphagneticola calendulacea</i>	Asteraceae	Sphagneti cola	Heat-Clearing	A-549 31	Treat89	CL100144736_L 02_15
Group1 4	GX0835	<i>Forsythia suspensa</i>	Oleaceae	Forsythia	Heat-Clearing	A-549 16	Treat82	CL100144714_L 02_92
Group1 4	S111	<i>Polygonum perfoliatum</i>	Polygonac eae	Polygonu m	Heat-Clearing	A-549 58	Treat2	CL100120269_L 01_74
Group1 4	S084	<i>Malva verticillata</i> var. <i>crispa</i>	Malvaceae	Malva	Heat-Clearing	A-549 50	Treat60	CL100144672_L 02_66
Group1 4	S104	<i>Mallotus apelta</i>	Euphorbiac eae	Mallotus	Heat-Clearing	A-549 56	Treat66	CL100144672_L 02_72

Group1 4	S058	<i>Pteris semipinnata</i>	Pteridaceae	Pteris	Hemostatic	A-549	44	Treat54	CL100144672_L 02_60
Group1 4	W2	<i>Panax ginseng C. A. Meyer</i>	Araliaceae	Panax	Tonic	A-549	2	Treat68	CL100144714_L 01_78
Group1 4	GX0827	<i>Astragalus mem branaceus</i>	Leguminos ae	Astragalus	Tonic	A-549	12	Treat78	CL100144714_L 02_88
Group1 4	GX0830	<i>Angelica sinensis</i>	Apiaceae	Angelica	Tonic	A-549	13	Treat79	CL100144714_L 02_89
Group1 4	GX0838	<i>Lycium chinense</i>	Solanaceae	Lycium	Tonic	A-549	18	Treat84	CL100144714_L 02_94
Group1 4	GX0839	<i>Cullen corylifolium</i>	Fabaceae	Cullen	Tonic	A-549	19	Treat85	CL100144714_L 02_95
Group1 4	S052	<i>Acmella paniculata</i>	Asteraceae	Acmella	Rsthmatics, expectorants and antitussives	A-549	42	Treat52	CL100144672_L 02_58
Group1 4	S161	<i>Aristolochia tagala</i>	Aristolochi aceae	Aristoloch ia	Rsthmatics, expectorants and antitussives	A-549	67	Treat11	CL100120269_L 01_83
Group1 4	GX0855	<i>Bischofia javanica</i>	Euphorbiac eae	Bischofia	Water- disinhibiting and damp-percolating	A-549	28	Treat39	CL100144672_L 01_104
Group1 4	GX0834	<i>Schisandra chinensis</i>	Schisandra ceae	Schisandra	Heat- clearingastringen t	A-549	15	Treat81	CL100144714_L 02_91
Group1 4	S120	<i>Entada phaseoloides</i>	Fabaceae	Entada	Heat- clearingastringen t	A-549	61	Treat5	CL100120269_L 01_77
Group1 4	S098	<i>Gelsemium elegans</i>	Loganiacea e	Gelsemiu m	Detoxifying, analgesia, antipruritic	A-549	54	Treat64	CL100144672_L 02_70
Group1 4	GX0823	<i>Arctium lappa</i>	Asteraceae	Arctium	Unclassified	A-549	8	Treat74	CL100144714_L 02_84
Group1 4	S081	<i>Ricinus communis L.</i>	Euphorbiac eae	Ricinus	Unclassified	A-549	48	Treat58	CL100144672_L 02_64
Group1 4	GX0854	<i>Platycodon grandiflorus</i>	Campanula ceae	Platycodo n	Unclassified	A-549	27	Treat38	CL100144672_L 01_103
Group1 4	S085	<i>Ligustrum confusum</i>	Oleaceae	Ligustrum	Unclassified	A-549	51	Treat61	CL100144672_L 02_67
Group1 4	S033	<i>Sesbania bispinosa</i>	Fabaceae	Sesbania	Unclassified	A-549	36	Treat43	CL100144672_L 01_44

**Supplemental Table 2 Summary of RNA-seq data quality control**

Sample Name			% Dups	% GC	Length	% Failed	M Seqs
CL100120269	L01	73	1	58.20%	47% 100 bp	10%	41
CL100120269	L01	73	2	53.10%	47% 100 bp	10%	41
CL100120269	L01	74	1	59.30%	47% 100 bp	10%	37.2
CL100120269	L01	74	2	51.90%	47% 100 bp	10%	37.2
CL100120269	L01	75	1	58.30%	47% 100 bp	10%	40.7
CL100120269	L01	75	2	53.80%	47% 100 bp	10%	40.7
CL100120269	L01	76	1	58.60%	47% 100 bp	10%	35.2
CL100120269	L01	76	2	50.80%	47% 100 bp	10%	35.2
CL100120269	L01	77	1	58.90%	47% 100 bp	10%	30.7
CL100120269	L01	77	2	52.50%	47% 100 bp	10%	30.7
CL100120269	L01	78	1	57.40%	47% 100 bp	10%	34.3
CL100120269	L01	78	2	51.50%	47% 100 bp	10%	34.3
CL100120269	L01	79	1	58.10%	47% 100 bp	10%	34.4
CL100120269	L01	79	2	49.40%	47% 100 bp	0%	34.4
CL100120269	L01	80	1	60.30%	46% 100 bp	10%	35.9
CL100120269	L01	80	2	52.90%	46% 100 bp	10%	35.9
CL100120269	L01	81	1	57.50%	46% 100 bp	10%	29.9
CL100120269	L01	81	2	49.20%	46% 100 bp	0%	29.9
CL100120269	L01	82	1	58.30%	46% 100 bp	10%	32.7
CL100120269	L01	82	2	49.70%	46% 100 bp	0%	32.7
CL100120269	L01	83	1	58.60%	46% 100 bp	10%	34.8
CL100120269	L01	83	2	50.30%	46% 100 bp	10%	34.8
CL100120269	L01	84	1	59.20%	46% 100 bp	10%	37.4
CL100120269	L01	84	2	50.40%	46% 100 bp	10%	37.4
CL100120269	L01	85	1	58.00%	46% 100 bp	10%	31.4
CL100120269	L01	85	2	50.60%	46% 100 bp	10%	31.4
CL100120269	L01	86	1	62.30%	46% 100 bp	10%	32.9
CL100120269	L01	86	2	56.00%	46% 100 bp	10%	32.9
CL100120269	L01	87	1	56.60%	46% 100 bp	10%	29.8
CL100120269	L01	87	2	48.30%	46% 100 bp	0%	29.8
CL100120269	L01	88	1	56.40%	46% 100 bp	10%	31.1
CL100120269	L01	88	2	49.70%	46% 100 bp	0%	31.1
CL100120269	L02	41	1	64.60%	46% 100 bp	10%	41.2
CL100120269	L02	41	2	61.60%	46% 100 bp	10%	41.2
CL100120269	L02	42	1	63.00%	46% 100 bp	10%	31.3
CL100120269	L02	42	2	58.00%	46% 100 bp	10%	31.3
CL100120269	L02	43	1	64.10%	46% 100 bp	10%	34.9
CL100120269	L02	43	2	60.80%	46% 100 bp	10%	34.9
CL100120269	L02	44	1	62.50%	46% 100 bp	10%	34.7
CL100120269	L02	44	2	59.80%	46% 100 bp	10%	34.7
CL100125983	L01	1	1	60.30%	47% 100 bp	10%	50.6
CL100125983	L01	1	2	61.50%	47% 100 bp	10%	50.6
CL100125983	L01	2	1	58.30%	47% 100 bp	10%	49.6
CL100125983	L01	2	2	57.10%	47% 100 bp	10%	49.6
CL100125983	L01	3	1	57.50%	47% 100 bp	10%	32.3
CL100125983	L01	3	2	51.50%	47% 100 bp	10%	32.3

CL100137964	L02	100	1	62.30%	48%	100 bp	10%	43
CL100137964	L02	100	2	61.10%	48%	100 bp	10%	43
CL100137964	L02	101	1	67.80%	47%	100 bp	10%	48.4
CL100137964	L02	101	2	66.90%	48%	100 bp	10%	48.4
CL100137964	L02	102	1	61.90%	47%	100 bp	10%	45.3
CL100137964	L02	102	2	60.20%	47%	100 bp	10%	45.3
CL100137964	L02	103	1	66.20%	47%	100 bp	10%	49
CL100137964	L02	103	2	65.50%	47%	100 bp	10%	49
CL100137964	L02	104	1	63.80%	48%	100 bp	10%	43.8
CL100137964	L02	104	2	62.40%	48%	100 bp	10%	43.8
CL100137964	L02	89	1	68.80%	47%	100 bp	10%	50.6
CL100137964	L02	89	2	67.80%	47%	100 bp	10%	50.6
CL100137964	L02	90	1	56.70%	47%	100 bp	10%	40.2
CL100137964	L02	90	2	55.90%	47%	100 bp	10%	40.2
CL100137964	L02	91	1	63.40%	47%	100 bp	10%	47.5
CL100137964	L02	91	2	62.20%	47%	100 bp	10%	47.5
CL100137964	L02	92	1	61.30%	47%	100 bp	10%	43.8
CL100137964	L02	92	2	60.00%	47%	100 bp	10%	43.8
CL100137964	L02	93	1	64.00%	47%	100 bp	10%	47.7
CL100137964	L02	93	2	62.80%	47%	100 bp	10%	47.7
CL100137964	L02	94	1	67.40%	47%	100 bp	10%	48.1
CL100137964	L02	94	2	66.60%	47%	100 bp	10%	48.1
CL100137964	L02	95	1	64.60%	47%	100 bp	10%	46
CL100137964	L02	95	2	63.40%	48%	100 bp	10%	46
CL100137964	L02	97	1	63.80%	47%	100 bp	10%	44.5
CL100137964	L02	97	2	63.20%	47%	100 bp	10%	44.5
CL100137964	L02	98	1	58.50%	48%	100 bp	10%	41.9
CL100137964	L02	98	2	57.20%	48%	100 bp	10%	41.9
CL100137964	L02	99	1	63.40%	48%	100 bp	10%	46.4
CL100137964	L02	99	2	62.20%	48%	100 bp	10%	46.4
CL100144672	L01	100	1	71.20%	47%	100 bp	10%	42.5
CL100144672	L01	100	2	65.90%	47%	100 bp	10%	42.5
CL100144672	L01	101	1	75.00%	47%	100 bp	10%	41.4
CL100144672	L01	101	2	67.20%	47%	100 bp	10%	41.4
CL100144672	L01	102	1	74.40%	46%	100 bp	10%	51
CL100144672	L01	102	2	68.20%	46%	100 bp	10%	51
CL100144672	L01	103	1	73.30%	47%	100 bp	10%	46.1
CL100144672	L01	103	2	68.20%	46%	100 bp	10%	46.1
CL100144672	L01	104	1	73.20%	47%	100 bp	10%	41.7
CL100144672	L01	104	2	67.20%	46%	100 bp	10%	41.7
CL100144672	L01	41	1	73.00%	47%	100 bp	10%	44.1
CL100144672	L01	41	2	66.90%	46%	100 bp	10%	44.1
CL100144672	L01	42	1	70.90%	46%	100 bp	10%	38.5
CL100144672	L01	42	2	63.00%	46%	100 bp	10%	38.5
CL100144672	L01	43	1	73.60%	46%	100 bp	10%	40.6
CL100144672	L01	43	2	66.70%	46%	100 bp	10%	40.6
CL100144672	L01	44	1	69.20%	46%	100 bp	10%	33.9
CL100144672	L01	44	2	59.20%	46%	100 bp	10%	33.9



CL100144672	L01	45	1	62.90%	46%	100 bp	10%	26.8
CL100144672	L01	45	2	50.80%	46%	100 bp	10%	26.8
CL100144672	L01	46	1	69.80%	46%	100 bp	10%	37.3
CL100144672	L01	46	2	61.00%	46%	100 bp	10%	37.3
CL100144672	L01	47	1	72.10%	46%	100 bp	10%	45.6
CL100144672	L01	47	2	65.60%	46%	100 bp	10%	45.6
CL100144672	L01	48	1	70.90%	46%	100 bp	10%	39.6
CL100144672	L01	48	2	63.30%	46%	100 bp	10%	39.6
CL100144672	L01	97	1	71.30%	47%	100 bp	10%	35.4
CL100144672	L01	97	2	63.00%	47%	100 bp	10%	35.4
CL100144672	L01	98	1	72.40%	47%	100 bp	10%	43.5
CL100144672	L01	98	2	66.60%	47%	100 bp	10%	43.5
CL100144672	L01	99	1	73.30%	47%	100 bp	10%	39
CL100144672	L01	99	2	65.50%	46%	100 bp	10%	39
CL100144672	L02	57	1	68.90%	47%	100 bp	10%	41.6
CL100144672	L02	57	2	67.00%	47%	100 bp	10%	41.6
CL100144672	L02	58	1	73.20%	47%	100 bp	10%	50.2
CL100144672	L02	58	2	72.10%	47%	100 bp	10%	50.2
CL100144672	L02	59	1	76.90%	50%	100 bp	10%	46.3
CL100144672	L02	59	2	74.40%	50%	100 bp	10%	46.3
CL100144672	L02	60	1	70.30%	47%	100 bp	10%	53
CL100144672	L02	60	2	69.60%	47%	100 bp	10%	53
CL100144672	L02	61	1	69.10%	47%	100 bp	10%	45.5
CL100144672	L02	61	2	67.10%	47%	100 bp	10%	45.5
CL100144672	L02	62	1	64.90%	47%	100 bp	10%	40.4
CL100144672	L02	62	2	64.00%	47%	100 bp	10%	40.4
CL100144672	L02	63	1	69.60%	47%	100 bp	10%	46.7
CL100144672	L02	63	2	68.40%	47%	100 bp	10%	46.7
CL100144672	L02	64	1	69.80%	47%	100 bp	10%	47.4
CL100144672	L02	64	2	68.70%	47%	100 bp	10%	47.4
CL100144672	L02	65	1	70.00%	48%	100 bp	10%	45.1
CL100144672	L02	65	2	68.80%	48%	100 bp	10%	45.1
CL100144672	L02	66	1	69.00%	47%	100 bp	10%	48.8
CL100144672	L02	66	2	68.00%	47%	100 bp	10%	48.8
CL100144672	L02	67	1	69.60%	47%	100 bp	10%	47.3
CL100144672	L02	67	2	68.00%	47%	100 bp	10%	47.3
CL100144672	L02	68	1	68.90%	47%	100 bp	10%	42.6
CL100144672	L02	68	2	67.00%	47%	100 bp	10%	42.6
CL100144672	L02	69	1	67.40%	47%	100 bp	10%	46.1
CL100144672	L02	69	2	67.00%	47%	100 bp	10%	46.1
CL100144672	L02	70	1	66.10%	47%	100 bp	10%	37.6
CL100144672	L02	70	2	63.50%	47%	100 bp	10%	37.6
CL100144672	L02	71	1	67.10%	48%	100 bp	10%	41.6
CL100144672	L02	71	2	64.60%	47%	100 bp	10%	41.6
CL100144672	L02	72	1	68.90%	47%	100 bp	10%	50.3
CL100144672	L02	72	2	67.30%	47%	100 bp	10%	50.3
CL100144714	L01	77	1	71.10%	48%	100 bp	10%	50.1
CL100144714	L01	77	2	70.50%	48%	100 bp	10%	50.1

CL100144714	L01	78	1	59.50%	47%	100 bp	10%	40.7
CL100144714	L01	78	2	59.60%	47%	100 bp	10%	40.7
CL100144714	L01	79	1	63.30%	48%	100 bp	10%	28.9
CL100144714	L01	79	2	61.10%	48%	100 bp	10%	28.9
CL100144714	L01	80	1	66.60%	48%	100 bp	10%	34.2
CL100144714	L01	80	2	66.00%	48%	100 bp	10%	34.2
CL100144714	L02	81	1	70.90%	47%	100 bp	10%	49.1
CL100144714	L02	81	2	70.40%	47%	100 bp	10%	49.1
CL100144714	L02	82	1	69.20%	47%	100 bp	10%	42.8
CL100144714	L02	82	2	68.60%	47%	100 bp	10%	42.8
CL100144714	L02	83	1	69.70%	47%	100 bp	10%	42.5
CL100144714	L02	83	2	69.30%	47%	100 bp	10%	42.5
CL100144714	L02	84	1	69.50%	47%	100 bp	10%	43.1
CL100144714	L02	84	2	68.80%	47%	100 bp	10%	43.1
CL100144714	L02	85	1	71.70%	47%	100 bp	10%	40.6
CL100144714	L02	85	2	71.20%	47%	100 bp	10%	40.6
CL100144714	L02	86	1	71.80%	47%	100 bp	10%	53.4
CL100144714	L02	86	2	71.40%	47%	100 bp	10%	53.4
CL100144714	L02	87	1	70.90%	47%	100 bp	10%	50
CL100144714	L02	87	2	70.30%	47%	100 bp	10%	50
CL100144714	L02	88	1	69.20%	47%	100 bp	10%	42
CL100144714	L02	88	2	68.80%	47%	100 bp	10%	42
CL100144714	L02	89	1	70.50%	47%	100 bp	10%	52.5
CL100144714	L02	89	2	70.00%	47%	100 bp	10%	52.5
CL100144714	L02	90	1	71.00%	46%	100 bp	10%	42.8
CL100144714	L02	90	2	70.50%	46%	100 bp	10%	42.8
CL100144714	L02	91	1	71.80%	47%	100 bp	10%	51.1
CL100144714	L02	91	2	71.30%	47%	100 bp	10%	51.1
CL100144714	L02	92	1	69.60%	47%	100 bp	10%	40.5
CL100144714	L02	92	2	69.00%	47%	100 bp	10%	40.5
CL100144714	L02	93	1	69.60%	47%	100 bp	10%	41
CL100144714	L02	93	2	69.10%	47%	100 bp	10%	41
CL100144714	L02	94	1	68.70%	47%	100 bp	10%	36.9
CL100144714	L02	94	2	68.40%	47%	100 bp	10%	36.9
CL100144714	L02	95	1	69.60%	47%	100 bp	10%	40.9
CL100144714	L02	95	2	69.00%	47%	100 bp	10%	40.9
CL100144714	L02	96	1	69.70%	47%	100 bp	10%	40.5
CL100144714	L02	96	2	69.30%	47%	100 bp	10%	40.5
CL100144736	L02	13	1	67.10%	46%	100 bp	10%	52.1
CL100144736	L02	13	2	70.30%	46%	100 bp	10%	52.1
CL100144736	L02	14	1	67.30%	46%	100 bp	10%	51.6
CL100144736	L02	14	2	70.30%	46%	100 bp	10%	51.6
CL100144736	L02	15	1	65.60%	47%	100 bp	10%	48.1
CL100144736	L02	15	2	68.30%	47%	100 bp	10%	48.1
CL100144736	L02	16	1	65.10%	46%	100 bp	10%	45.3
CL100144736	L02	16	2	68.00%	46%	100 bp	10%	45.3
CL100144736	L02	41	1	64.00%	46%	100 bp	10%	42.5
CL100144736_L02_41_2				66.00%	46%	100 bp	10%	42.5

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CL100144736	L02	42	1	63.50%	47% 100 bp	10%	42.5
CL100144736	L02	42	2	65.40%	47% 100 bp	10%	42.5

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**Table 3 RNA-seq data statistics**

sample	total raw reads	total raw base	total clean reads	total clean base	mapping rate
CL100120269_L01_73	82008824	8200882400	79729218	7912797062	92.60%
CL100120269_L01_74	74350910	7435091000	72425410	7186671234	96.70%
CL100120269_L01_75	81319576	8131957600	79141634	7851958398	95.71%
CL100120269_L01_76	70387168	7038716800	68624828	6809035916	95.98%
CL100120269_L01_77	61414370	6141437000	59696106	5924058080	96.49%
CL100120269_L01_78	68630096	6863009600	66709360	6609551178	96.07%
CL100120269_L01_79	68807166	6880716600	66587598	6605056136	95.76%
CL100120269_L01_80	71730234	7173023400	69627308	6906447644	94.89%
CL100120269_L01_81	59894050	5989405000	57923596	5748223820	96.68%
CL100120269_L01_82	65361948	6536194800	62793456	6227583332	96.53%
CL100120269_L01_83	69662570	6966257000	67306992	6677226182	96.50%
CL100120269_L01_84	74883776	7488377600	72127118	7153425922	95.78%
CL100120269_L01_85	62830434	6283043400	60891768	6038754170	95.47%
CL100120269_L01_86	65746904	6574690400	63924624	6339115696	95.70%
CL100120269_L01_87	59546164	5954616400	57627350	5719049142	95.78%
CL100120269_L01_88	62188890	6218889000	60322816	5980663542	96.41%
CL100120269_L02_41	82435698	8243569800	80197116	7961663432	95.99%
CL100120269_L02_42	62676296	6267629600	60532672	6009410110	96.53%
CL100120269_L02_43	69722086	6972208600	67577820	6706767092	96.81%
CL100120269_L02_44	69399516	6939951600	67432662	6690100338	95.98%
CL100125983_L01_1	101125050	10112505000	98495616	9778069796	98.28%
CL100125983_L01_2	99166218	9916621800	95763556	9516419792	97.66%
CL100125983_L01_3	64623004	6462300400	62343184	6197728726	97.54%
CL100137964_L02_100	86080436	8608043600	84519134	8424456792	97.15%
CL100137964_L02_101	96708158	9670815800	94862928	9454377946	97.01%
CL100137964_L02_102	90615208	9061520800	87331802	8701437782	98.03%
CL100137964_L02_103	97963070	9796307000	96046814	9567575368	97.17%
CL100137964_L02_104	87688196	8768819600	85989576	8570514180	97.10%
CL100137964_L02_89	101270852	10127085200	99494876	9914021308	96.94%
CL100137964_L02_90	80384888	8038488800	79082428	7882557176	97.01%
CL100137964_L02_91	94930256	9493025600	93079130	9277311818	97.14%
CL100137964_L02_92	87554314	8755431400	85960746	8567645270	97.26%
CL100137964_L02_93	95449010	9544901000	93726676	9340911884	97.21%
CL100137964_L02_94	96238478	9623847800	94842380	9450065844	97.12%
CL100137964_L02_95	91988230	9198823000	90104378	8980146350	97.31%
CL100137964_L02_97	88920024	8892002400	87395238	8710032044	96.94%
CL100137964_L02_98	83763742	8376374200	82102856	8183245822	97.30%
CL100137964_L02_99	92745436	9274543600	90648560	9034858770	97.16%
CL100144672_L01_100	84958934	8495893400	82829156	8239013948	97.46%
CL100144672_L01_101	82807384	8280738400	80890678	8049168014	97.22%
CL100144672_L01_102	101999262	10199926200	99467524	9892629610	97.39%
CL100144672_L01_103	92282896	9228289600	90182566	8966257096	97.55%
CL100144672_L01_104	83463176	8346317600	81570016	8119678086	97.73%
CL100144672_L01_41	88289562	8828956200	85798196	8538464894	97.41%
CL100144672_L01_42	77019304	7701930400	74365460	7397562332	97.59%
CL100144672_L01_43	81202924	8120292400	79433106	7904700662	97.17%
CL100144672_L01_44	67833022	6783302200	65543092	6521154504	97.49%
CL100144672_L01_45	53677736	5367773600	51541232	5126117156	97.02%
CL100144672_L01_46	74661240	7466124000	72436276	7205676924	97.44%
CL100144672_L01_47	91172432	9117243200	88278290	8782467200	97.40%
CL100144672_L01_48	79245114	7924511400	77168460	7674807162	96.74%
CL100144672_L01_97	70769266	7076926600	69161266	6883548198	97.60%

CL100144672_L01_98	87061270	8706127000	84970692	8458297448	97.76%
CL100144672_L01_99	78009172	7800917200	76112972	7578184066	97.28%
CL100144672_L02_57	83134164	8313416400	80694898	8039330318	97.40%
CL100144672_L02_58	100334976	10033497600	97681572	9728735982	96.53%
CL100144672_L02_59	92503994	9250399400	89626900	8925322948	96.83%
CL100144672_L02_60	105964108	10596410800	103278946	10284080524	97.34%
CL100144672_L02_61	91018192	9101819200	88526686	8818675392	97.15%
CL100144672_L02_62	80865704	8086570400	78772714	7844263352	97.51%
CL100144672_L02_63	93430146	9343014600	90478732	9014584592	97.49%
CL100144672_L02_64	94861150	9486115000	92328968	9198409334	97.39%
CL100144672_L02_65	90178728	9017872800	88129786	8780543100	97.24%
CL100144672_L02_66	97699460	9769946000	94589312	9422685632	97.44%
CL100144672_L02_67	94561616	9456161600	90587472	9022319654	97.72%
CL100144672_L02_68	85182390	8518239000	82065740	8174235938	97.53%
CL100144672_L02_69	92268560	9226856000	89842910	8939955416	97.38%
CL100144672_L02_70	75150742	7515074200	73381674	7302728148	96.94%
CL100144672_L02_71	83113416	8311341600	80609990	8032446134	97.47%
CL100144672_L02_72	100535122	10053512200	96305380	9593768568	97.48%
CL100144714_L01_77	100154606	10015460600	97657924	9728948358	97.46%
CL100144714_L01_78	81464674	8146467400	79107662	7870985604	85.84%
CL100144714_L01_79	57753162	5775316200	56202398	5598240812	96.34%
CL100144714_L01_80	68318538	6831853800	66955950	6671836048	97.04%
CL100144714_L02_81	98124416	9812441600	95876066	9558205254	97.25%
CL100144714_L02_82	85651694	8565169400	83318244	8305400144	97.28%
CL100144714_L02_83	84910180	8491018000	82697754	8243439976	97.02%
CL100144714_L02_84	86212296	8621229600	83631198	8332718282	97.36%
CL100144714_L02_85	81122400	8112240000	78948110	7864568524	96.94%
CL100144714_L02_86	106894450	10689445000	104277006	10390695280	97.19%
CL100144714_L02_87	100068832	10006883200	97885914	9760829032	97.34%
CL100144714_L02_88	83976080	8397608000	81895386	8159541850	97.18%
CL100144714_L02_89	104903298	10490329800	102569686	10221177038	97.09%
CL100144714_L02_90	85622492	8562249200	83774502	8350191084	96.64%
CL100144714_L02_91	102235384	10223538400	99516062	9919243852	96.85%
CL100144714_L02_92	80945096	8094509600	78616162	7834971692	96.93%
CL100144714_L02_93	81910274	8191027400	79711016	7943956914	97.42%
CL100144714_L02_94	73816284	7381628400	71896710	7157270164	97.19%
CL100144714_L02_95	81840088	8184008800	79144016	7887253208	97.70%
CL100144714_L02_96	80961060	8096106000	78653134	7841448466	97.43%
CL100144736_L02_13	104270526	10427052600	102174712	10176373764	97.21%
CL100144736_L02_14	103188016	10318801600	101359632	10101554514	97.57%
CL100144736_L02_15	96299916	9629991600	94561772	9425180090	97.50%
CL100144736_L02_16	90584634	9058463400	88895170	8859049264	97.36%
CL100144736_L02_41	85082014	8508201400	83306592	8303527050	97.89%
CL100144736_L02_42	84954808	8495480800	82773434	8248971882	98.11%
Total	8066731626	806.67G	7855046204	785.50G	

**Supplemental Table 4 Differential gene expression**

Compare	Significant	Up-regulated	Down-regulated	Sample name	Note
Treat53_vs_CK	6130	2479	3651	<i>Argyreia pierreana</i>	Candidate TCM
Treat91_vs_CK	1865	966	899	<i>Excoecaria cochinchinensis</i> Lour.	
Treat8_vs_CK	1651	867	784	<i>Breynia fruticosa</i>	Candidate TCM
Treat56_vs_CK	1541	566	975	<i>Tabernaemontana divaricata</i>	
Treat63_vs_CK	1162	550	612	<i>Senecio scandens</i>	Candidate TCM
Treat6_vs_CK	956	350	606	<i>Melia azedarach</i>	
Treat59_vs_CK	814	527	287	<i>Phyllanthus reticulatus</i> Poir. var. <i>glaber</i> Muell.-Age.	
Treat44_vs_CK	745	266	479	<i>Chromolaena</i>	
Treat27_vs_CK	645	186	459	<i>Sorafenib</i> <i>Excoecaria</i>	
Treat90_vs_CK	627	259	368	<i>cochinchinensis</i> <i>Lour</i>	
Treat3_vs_CK	612	231	381		
Treat64_vs_CK	555	239	316		
Treat11_vs_CK	554	270	284		
Treat12_vs_CK	542	149	393		
Treat60_vs_CK	533	192	341		
Treat58_vs_CK	479	167	312		
Treat26_vs_CK	453	129	324		
Treat65_vs_CK	431	187	244		
Treat7_vs_CK	346	172	174		
Treat40_vs_CK	276	104	172		
Treat47_vs_CK	259	85	174		
Treat41_vs_CK	227	68	159		
Treat5_vs_CK	200	64	136		
Treat51_vs_CK	187	77	110		
Treat92_vs_CK	185	68	117		
Treat43_vs_CK	184	42	142		
Treat18_vs_CK	177	33	144		
Treat17_vs_CK	173	84	89		
Treat32_vs_CK	172	131	41		
Treat42_vs_CK	172	52	120		
Treat48_vs_CK	170	65	105		
Treat45_vs_CK	162	42	120		
Treat13_vs_CK	159	40	119		

Treat9_vs_CK	157	23	134
Treat19_vs_CK	156	32	124
Treat74_vs_CK	156	63	93
Treat14_vs_CK	149	23	126
Treat83_vs_CK	148	93	55
Treat15_vs_CK	147	24	123
Treat46_vs_CK	135	40	95
Treat1_vs_CK	131	37	94
Treat75_vs_CK	128	86	42
Treat33_vs_CK	127	95	32
Treat23_vs_CK	112	83	29
Treat57_vs_CK	109	14	95
Treat89_vs_CK	109	26	83
Treat39_vs_CK	102	67	35
Treat76_vs_CK	102	55	47
Treat36_vs_CK	98	49	49
Treat35_vs_CK	96	49	47
Treat50_vs_CK	95	32	63
Treat16_vs_CK	93	36	57
Treat52_vs_CK	92	33	59
Treat80_vs_CK	82	26	56
Treat66_vs_CK	81	18	63
Treat37_vs_CK	80	27	53
Treat72_vs_CK	79	27	52
Treat10_vs_CK	78	12	66
Treat54_vs_CK	65	25	40
Treat62_vs_CK	64	28	36
Treat49_vs_CK	60	46	14
Treat61_vs_CK	59	14	45
Treat88_vs_CK	59	20	39
Treat85_vs_CK	55	27	28
Treat34_vs_CK	52	40	12
Treat87_vs_CK	48	15	33
Treat55_vs_CK	47	22	25
Treat20_vs_CK	46	12	34
Treat79_vs_CK	46	38	8
Treat73_vs_CK	45	14	31
Treat78_vs_CK	45	39	6
Treat69_vs_CK	41	22	19
Treat81_vs_CK	38	18	20
Treat77_vs_CK	37	11	26
Treat4_vs_CK	36	12	24
Treat38_vs_CK	31	13	18
Treat29_vs_CK	30	19	11
Treat25_vs_CK	29	15	14
Treat67_vs_CK	28	16	12
Treat2_vs_CK	27	11	16
Treat21_vs_CK	22	12	10
Treat28_vs_CK	22	13	9
Treat30_vs_CK	22	12	10
Treat71_vs_CK	22	12	10
Treat22_vs_CK	21	11	10
Treat68_vs_CK	21	11	10

Treat70_vs_CK	20	13	7
Treat31_vs_CK	18	5	13
Treat82_vs_CK	17	8	9
Treat84_vs_CK	17	8	9
Treat86_vs_CK	15	8	7
Treat24_vs_CK	13	5	8

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**Supplemental Table 5 Pathway results of traditional Chinese medicine and positive control**

Treat	Description	pvalue	p.adjust	qvalue
Treat1	Complement and coagulation cascades	0.000183	0.021053	0.021053
Treat3	Complement and coagulation cascades	2.85E-07	7.69E-05	7.41E-05
	Cell cycle	1.75E-08	5.05E-06	4.69E-06
Treat6	DNA replication	9.58E-07	0.000138	0.000129
	p53 signaling pathway	2.93E-05	0.00282	0.002619
	Retinol metabolism	7.33E-05	0.005298	0.004921
	Complement and coagulation cascades	2.44E-09	7.52E-07	6.66E-07
	MAPK signaling pathway	1.50E-06	0.00023	0.000204
	NF-kappa B signaling pathway	0.00011	0.011341	0.010038
Treat8	Fluid shear stress and atherosclerosis	0.000291	0.018273	0.016174
	Protein digestion and absorption	0.000297	0.018273	0.016174
	Retinol metabolism	0.000844	0.043303	0.03833
	Dilated cardiomyopathy	0.00108	0.047534	0.042075
	p53 signaling pathway	1.80E-10	4.85E-08	4.69E-08
Treat11	Platinum drug resistance	6.86E-05	0.009267	0.00896
	Glioma	0.00048	0.043179	0.041748
Treat14	Signaling pathways regulating pluripotency	0.000114	0.008446	0.007449
	TGF-beta signaling pathway	0.000283	0.010473	0.009237
Treat16	Biosynthesis of amino acids	0.000228	0.017766	0.015104
	Oxidative phosphorylation	0.003856	0.024408	0.006851
	Retrograde endocannabinoid signaling	0.004755	0.024408	0.006851
	Non-alcoholic fatty liver disease	0.004882	0.024408	0.006851
	Thermogenesis	0.011296	0.032625	0.009158
Treat21	Nitrogen metabolism	0.012551	0.032625	0.009158
	Parkinson disease	0.01305	0.032625	0.009158
	Prion disease	0.015567	0.033358	0.009364
	Huntington disease	0.019351	0.036283	0.010185
	Amyotrophic lateral sclerosis	0.026868	0.041349	0.011607
	Alzheimer disease	0.027566	0.041349	0.011607
	Oxidative phosphorylation	0.002599	0.015374	0.002312
	Retrograde endocannabinoid signaling	0.003208	0.015374	0.002312
	Non-alcoholic fatty liver disease	0.003294	0.015374	0.002312
	Thermogenesis	0.007674	0.024764	0.003724
	Parkinson disease	0.008879	0.024764	0.003724
Treat22	Prion disease	0.010613	0.024764	0.003724
	Huntington disease	0.013229	0.026458	0.003979
	Amyotrophic lateral sclerosis	0.018457	0.029468	0.004431
	Alzheimer disease	0.018944	0.029468	0.004431
	Proteasome	0.028126	0.038915	0.005852
	Pathways of neurodegeneration - multiple d	0.030576	0.038915	0.005852
	p53 signaling pathway	4.48E-10	4.75E-08	3.91E-08
Treat23	Transcriptional misregulation in cancer	0.000128	0.006782	0.00559
	Platinum drug resistance	0.000231	0.006793	0.005599
	Glioma	0.000256	0.006793	0.005599
	Spliceosome	0.004946	0.02919	0.010242
	Nitrogen metabolism	0.012551	0.02919	0.010242

Treat25	2-Oxocarboxylic acid metabolism	0.014018	0.02919	0.010242
	One carbon pool by folate	0.014752	0.02919	0.010242
	Arginine biosynthesis	0.016217	0.02919	0.010242
	Antifolate resistance	0.022788	0.034181	0.011993
	Cell cycle	2.07E-07	4.95E-05	3.95E-05
	p53 signaling pathway	4.59E-07	5.49E-05	4.37E-05
	Cellular senescence	2.92E-06	0.000233	0.000185
	Viral carcinogenesis	1.16E-05	0.000696	0.000555
	Alcoholism	2.12E-05	0.001012	0.000807
	Small cell lung cancer	0.00019	0.007559	0.006026
Treat26	Glioma	0.000312	0.010637	0.00848
	Neutrophil extracellular trap formation	0.000465	0.01388	0.011065
	Systemic lupus erythematosus	0.000592	0.015712	0.012525
	GnRH signaling pathway	0.001147	0.026596	0.021202
	Prostate cancer	0.001468	0.026596	0.021202
	Human T-cell leukemia virus 1 infection	0.001501	0.026596	0.021202
	Cushing syndrome	0.001502	0.026596	0.021202
	Endocrine resistance	0.001558	0.026596	0.021202
	Fluid shear stress and atherosclerosis	0.002894	0.046104	0.036753
	Cell cycle	1.90E-06	0.000484	0.000425
Treat27	p53 signaling pathway	0.000399	0.041389	0.036363
	Viral carcinogenesis	0.000489	0.041389	0.036363
	Alcoholism	0.000687	0.043648	0.038348
Treat29	p53 signaling pathway	9.80E-08	8.63E-06	7.33E-06
	Platinum drug resistance	0.000239	0.010524	0.008938
	Measles	0.001574	0.046179	0.039219
Treat32	Steroid biosynthesis	6.65E-13	7.39E-11	6.86E-11
	Terpenoid backbone biosynthesis	4.54E-07	2.52E-05	2.34E-05
	Biosynthesis of amino acids	0.00022	0.008143	0.007568
	Cysteine and methionine metabolism	0.000489	0.013563	0.012604
	p53 signaling pathway	2.87E-12	3.94E-10	3.24E-10
	Platinum drug resistance	3.85E-05	0.002634	0.002166
	FoxO signaling pathway	6.01E-05	0.002743	0.002255
Treat33	Epstein-Barr virus infection	8.21E-05	0.002812	0.002312
	Melanoma	0.000548	0.01318	0.010836
	Glioma	0.00064	0.01318	0.010836
	Chronic myeloid leukemia	0.000673	0.01318	0.010836
	Thyroid cancer	0.000959	0.016327	0.013423
	Colorectal cancer	0.001073	0.016327	0.013423
	Small cell lung cancer	0.001379	0.018894	0.015533
	Endometrial cancer	0.003525	0.043907	0.036097
	Cell cycle	0.004095	0.04675	0.038434
	Basal cell carcinoma	0.004454	0.046941	0.038592
Treat35	Complement and coagulation cascades	0.000415	0.032825	0.030393
	IL-17 signaling pathway	0.000608	0.032825	0.030393
Treat36	TGF-beta signaling pathway	0.000283	0.014436	0.013408
	Signaling pathways regulating pluripotency	0.00138	0.035184	0.032679
Treat39	TGF-beta signaling pathway	0.000128	0.011647	0.011451
	Signaling pathways regulating pluripotency	0.000639	0.029077	0.028589
Treat40	MAPK signaling pathway	7.59E-05	0.01488	0.014065

Treat43	Steroid biosynthesis	1.06E-05	0.001409	0.001327
	Terpenoid backbone biosynthesis	0.000489	0.031436	0.029607
	Fatty acid metabolism	0.000709	0.031436	0.029607
	Cell cycle	1.97E-16	4.65E-14	4.21E-14
	p53 signaling pathway	3.94E-14	4.65E-12	4.21E-12
	DNA replication	9.04E-11	7.11E-09	6.44E-09
	Cellular senescence	5.02E-06	0.000296	0.000268
Treat44	Apoptosis	8.27E-05	0.003902	0.003533
	Mismatch repair	0.000328	0.012891	0.011672
	Progesterone-mediated oocyte maturation	0.000382	0.012891	0.011672
	Fanconi anemia pathway	0.000615	0.01661	0.015039
	Gap junction	0.000633	0.01661	0.015039
	Oocyte meiosis	0.000777	0.018343	0.016608
	Amyotrophic lateral sclerosis	0.002227	0.047776	0.043258
Treat45	ECM-receptor interaction	0.000336	0.040978	0.040306
Treat46	Signaling pathways regulating pluripotency	0.000506	0.037352	0.036369
	TGF-beta signaling pathway	0.000934	0.037352	0.036369
Treat49	Spliceosome	2.12E-09	5.72E-08	5.35E-08
	RNA transport	3.52E-07	4.75E-06	4.45E-06
Treat51	Complement and coagulation cascades	0.000101	0.017012	0.016734
	Ribosome	2.27E-07	4.10E-05	2.94E-05
	FoxO signaling pathway	2.54E-07	4.10E-05	2.94E-05
	Renal cell carcinoma	3.92E-07	4.23E-05	3.03E-05
	Ubiquitin mediated proteolysis	3.58E-06	0.000289	0.000207
	Coronavirus disease - COVID-19	4.88E-06	0.000315	0.000226
	Thermogenesis	7.73E-06	0.000416	0.000298
	Colorectal cancer	1.16E-05	0.000533	0.000382
	Adherens junction	2.89E-05	0.001167	0.000837
	Cellular senescence	3.76E-05	0.001326	0.000951
	Homologous recombination	4.10E-05	0.001326	0.000951
	Chronic myeloid leukemia	5.85E-05	0.001717	0.001231
	Longevity regulating pathway	7.70E-05	0.002072	0.001486
	Insulin signaling pathway	8.76E-05	0.002176	0.00156
	Non-small cell lung cancer	0.000112	0.002575	0.001846
	Endometrial cancer	0.000146	0.003068	0.002199
	Pancreatic cancer	0.000152	0.003068	0.002199
	Autophagy - animal	0.00018	0.003411	0.002445
	mTOR signaling pathway	0.00024	0.004308	0.003089
	EGFR tyrosine kinase inhibitor resistance	0.000365	0.006198	0.004444
	Thyroid hormone signaling pathway	0.000793	0.012216	0.008758
	Endocrine resistance	0.000794	0.012216	0.008758
	Platinum drug resistance	0.000917	0.013458	0.009649
	Thyroid cancer	0.000968	0.0136	0.009751
	Sphingolipid signaling pathway	0.001036	0.013942	0.009996
	Bacterial invasion of epithelial cells	0.001141	0.014356	0.010292
	Non-alcoholic fatty liver disease	0.001156	0.014356	0.010292
	Prostate cancer	0.001318	0.015212	0.010906
	Hepatocellular carcinoma	0.001319	0.015212	0.010906
	Cell cycle	0.001427	0.01589	0.011392
	Human cytomegalovirus infection	0.001483	0.015966	0.011447
	Melanoma	0.001612	0.016003	0.011474
Biosynthesis of unsaturated fatty acids	0.001628	0.016003	0.011474	

Treat53	Choline metabolism in cancer	0.001635	0.016003	0.011474
	Inositol phosphate metabolism	0.00207	0.019661	0.014096
	Purine metabolism	0.002293	0.021097	0.015126
	Apelin signaling pathway	0.002351	0.021097	0.015126
	Human papillomavirus infection	0.002529	0.022074	0.015826
	Platelet activation	0.002653	0.022555	0.016171
	VEGF signaling pathway	0.003382	0.027846	0.019964
	Rap1 signaling pathway	0.003473	0.027846	0.019964
	Signaling pathways regulating pluripotency	0.003568	0.027846	0.019964
	Growth hormone synthesis, secretion and ac	0.003664	0.027846	0.019964
	Small cell lung cancer	0.003707	0.027846	0.019964
	Hippo signaling pathway - multiple species	0.00384	0.028188	0.02021
	Endocytosis	0.00404	0.028506	0.020438
	Bladder cancer	0.00406	0.028506	0.020438
	AMPK signaling pathway	0.004353	0.029917	0.02145
	Fatty acid metabolism	0.004592	0.030898	0.022153
	Fanconi anemia pathway	0.004806	0.031679	0.022713
	Phosphatidylinositol signaling system	0.005099	0.032938	0.023615
	MAPK signaling pathway	0.005384	0.033369	0.023924
	TGF-beta signaling pathway	0.005479	0.033369	0.023924
	Various types of N-glycan biosynthesis	0.005647	0.033369	0.023924
	Alzheimer disease	0.005669	0.033369	0.023924
	Protein processing in endoplasmic reticulum	0.005817	0.033369	0.023924
	Insulin resistance	0.005869	0.033369	0.023924
	Huntington disease	0.005892	0.033369	0.023924
	Hippo signaling pathway	0.005992	0.033369	0.023924
	Mitophagy - animal	0.006274	0.034346	0.024625
	Oxytocin signaling pathway	0.00647	0.034828	0.024971
	Oxidative phosphorylation	0.006605	0.034972	0.025074
	ErbB signaling pathway	0.006789	0.035041	0.025123
	Glioma	0.006835	0.035041	0.025123
	Longevity regulating pathway - multiple spe	0.007092	0.035792	0.025662
	RNA degradation	0.007822	0.038434	0.027556
Aldosterone-regulated sodium reabsorption	0.007853	0.038434	0.027556	
N-Glycan biosynthesis	0.008881	0.042815	0.030697	
Regulation of actin cytoskeleton	0.009106	0.043255	0.031012	
Nucleotide excision repair	0.009337	0.04371	0.031338	
Long-term depression	0.009482	0.043754	0.03137	
Ovarian steroidogenesis	0.00018	0.011725	0.007785	
Treat54	Glycerophospholipid metabolism	0.001234	0.029508	0.019592
	alpha-Linolenic acid metabolism	0.001362	0.029508	0.019592
	Linoleic acid metabolism	0.001833	0.029793	0.019782
	Cell cycle	1.74E-09	5.46E-07	4.74E-07
	DNA replication	1.28E-08	2.00E-06	1.74E-06
Treat56	p53 signaling pathway	3.60E-07	3.76E-05	3.26E-05
	Cysteine and methionine metabolism	0.00021	0.014147	0.012275
	Colorectal cancer	0.000256	0.014147	0.012275
	Cellular senescence	0.000271	0.014147	0.012275
	Mismatch repair	0.00037	0.016565	0.014373
	Prostate cancer	0.000961	0.037581	0.032607
	Complement and coagulation cascades	3.19E-08	7.59E-06	6.84E-06
	Bile secretion	2.46E-05	0.002932	0.002645

Treat58	Retinol metabolism	0.000108	0.0086	0.00776
	Metabolism of xenobiotics by cytochrome F	0.000286	0.01699	0.01533
	Chemical carcinogenesis	0.000438	0.02084	0.018803
	Tyrosine metabolism	0.001032	0.040939	0.036938
Treat59	Steroid biosynthesis	4.36E-09	1.20E-06	1.14E-06
	Terpenoid backbone biosynthesis	3.99E-06	0.00055	0.00052
	Complement and coagulation cascades	1.55E-08	3.80E-06	3.48E-06
	Chemical carcinogenesis	0.000188	0.014973	0.013711
Treat60	Tyrosine metabolism	0.000217	0.014973	0.013711
	Retinol metabolism	0.000243	0.014973	0.013711
	Metabolism of xenobiotics by cytochrome F	0.000626	0.030806	0.028209
	Complement and coagulation cascades	1.02E-12	3.00E-10	2.60E-10
Treat63	NF-kappa B signaling pathway	2.22E-06	0.000224	0.000194
	Retinol metabolism	2.29E-06	0.000224	0.000194
	ECM-receptor interaction	1.50E-05	0.001102	0.000954
	Amoebiasis	9.80E-05	0.005298	0.00459
	Axon guidance	0.000108	0.005298	0.00459
	Focal adhesion	0.000188	0.007883	0.00683
	AGE-RAGE signaling pathway in diabetic c	0.000268	0.008806	0.00763
	Bile secretion	0.00029	0.008806	0.00763
	TNF signaling pathway	0.0003	0.008806	0.00763
	Tyrosine metabolism	0.000524	0.014001	0.012131
	Metabolism of xenobiotics by cytochrome F	0.000859	0.021041	0.018231
	IL-17 signaling pathway	0.001471	0.029436	0.025505
	Drug metabolism - cytochrome P450	0.001482	0.029436	0.025505
	Chemical carcinogenesis	0.001502	0.029436	0.025505
	Maturity onset diabetes of the young	0.002145	0.038564	0.033414
	MAPK signaling pathway	0.00223	0.038564	0.033414
	Arrhythmogenic right ventricular cardiomyo	0.002574	0.042045	0.03643
	Fluid shear stress and atherosclerosis	0.003142	0.04862	0.042127
	Protein digestion and absorption	0.003372	0.04957	0.04295
Treat65	Retinol metabolism	0.000314	0.045002	0.04407
	Cysteine and methionine metabolism	0.000369	0.045002	0.04407
Treat67	Non-alcoholic fatty liver disease	0.000484	0.011618	0.006624
Treat69	Steroid biosynthesis	1.59E-10	5.41E-09	4.36E-09
	Terpenoid backbone biosynthesis	5.50E-08	9.35E-07	7.52E-07
Treat72	Signaling pathways regulating pluripotency	0.000161	0.009973	0.008804
	TGF-beta signaling pathway	0.000372	0.011538	0.010186
Treat73	TGF-beta signaling pathway	0.000505	0.012613	0.010622
	Signaling pathways regulating pluripotency	0.001708	0.021352	0.017981
Treat74	Aminoacyl-tRNA biosynthesis	4.49E-05	0.004262	0.003967
	Steroid biosynthesis	1.49E-09	1.62E-07	1.41E-07
Treat75	Terpenoid backbone biosynthesis	8.71E-06	0.000475	0.000413
	Aminoacyl-tRNA biosynthesis	0.000703	0.025541	0.022198
	RNA transport	1.13E-07	3.15E-06	4.74E-07
	Spliceosome	1.51E-06	2.12E-05	3.19E-06
	Glycerophospholipid metabolism	0.000351	0.002455	0.000369
	Choline metabolism in cancer	0.000351	0.002455	0.000369
	alpha-Linolenic acid metabolism	0.000594	0.003328	0.0005
	Linoleic acid metabolism	0.000802	0.00374	0.000562
	Ether lipid metabolism	0.002284	0.008651	0.001301
	Ovarian steroidogenesis	0.002472	0.008651	0.001301



	VEGF signaling pathway	0.003295	0.008957	0.001347
	Long-term depression	0.003406	0.008957	0.001347
	Arachidonic acid metabolism	0.003519	0.008957	0.001347
Treat78	Fc epsilon RI signaling pathway	0.004355	0.010161	0.001528
	GnRH signaling pathway	0.008011	0.016547	0.002488
	Fc gamma R-mediated phagocytosis	0.008691	0.016547	0.002488
	Inflammatory mediator regulation of TRP cl	0.008864	0.016547	0.002488
	Glutamatergic synapse	0.011855	0.019855	0.002986
	Serotonergic synapse	0.012055	0.019855	0.002986
	Platelet activation	0.013921	0.021655	0.003256
	Vascular smooth muscle contraction	0.015906	0.02344	0.003525
	Phospholipase D signaling pathway	0.019469	0.027257	0.004099
	Oxytocin signaling pathway	0.020981	0.027975	0.004207
	Necroptosis	0.022279	0.028355	0.004264
	Nitrogen metabolism	0.024953	0.030377	0.004568
Treat81	Signaling pathways regulating pluripotency	2.81E-05	0.000674	0.000562
	TGF-beta signaling pathway	0.000235	0.002815	0.002346
	Biosynthesis of amino acids	1.55E-06	0.000154	0.00015
Treat83	Cysteine and methionine metabolism	4.12E-06	0.000204	0.000199
	Glycine, serine and threonine metabolism	4.12E-05	0.001361	0.001332
	Steroid biosynthesis	0.000683	0.016271	0.013175
Treat85	Aldosterone synthesis and secretion	0.000862	0.016271	0.013175
	Biosynthesis of unsaturated fatty acids	0.001252	0.016271	0.013175
Treat88	Steroid hormone biosynthesis	0.000425	0.02082	0.019232
Treat90	Complement and coagulation cascades	3.99E-09	1.06E-06	1.02E-06
	Tyrosine metabolism	8.68E-05	0.011547	0.011058
	Complement and coagulation cascades	2.10E-08	6.48E-06	5.92E-06
Treat91	Retinol metabolism	3.45E-06	0.000534	0.000487
	NF-kappa B signaling pathway	5.12E-05	0.005272	0.004813
	Maturity onset diabetes of the young	0.000637	0.04923	0.044945
Treat92	Steroid biosynthesis	2.12E-05	0.00261	0.002501
Treat2	No pathway			
Treat4	No pathway			
Treat5	No pathway			
Treat7	No pathway			
Treat9	No pathway			
Treat10	No pathway			
Treat12	No pathway			
Treat13	No pathway			
Treat15	No pathway			
Treat17	No pathway			
Treat18	No pathway			
Treat19	No pathway			
Treat20	No pathway			
Treat24	No pathway			
Treat28	No pathway			
Treat30	No pathway			
Treat31	No pathway			
Treat34	No pathway			
Treat37	No pathway			
Treat38	No pathway			

Treat41	No pathway
Treat42	No pathway
Treat47	No pathway
Treat48	No pathway
Treat50	No pathway
Treat52	No pathway
Treat55	No pathway
Treat57	No pathway
Treat61	No pathway
Treat62	No pathway
Treat64	No pathway
Treat66	No pathway
Treat68	No pathway
Treat70	No pathway
Treat71	No pathway
Treat76	No pathway
Treat77	No pathway
Treat79	No pathway
Treat80	No pathway
Treat82	No pathway
Treat84	No pathway
Treat86	No pathway
Treat87	No pathway
Treat89	No pathway

Supplemental Table 6 The efficacy and representative compounds of samples

Groups	Sample name	Representative compounds	Efficacy	Pharmaceutical effect
Group1	<i>Ageratina adenophora</i>	Benzofuran derivatives (7-hydroxy-dehydrotremetone, 7,1-,11-trihydroxy dehydrotremetone, 1--oxo-7-hydroxy-nordehydrotremetone), a previously undescribed chromene derivative (5- $\beta$ -glucosyl-7-demethoxy-enecalinal) and a previously undescribed monoterpene glucoside (8-hydroxy-8- $\beta$ -glucosyl-2-carene)	Antifungal activity: 7-hydroxy-dehydrotremetone showed significant broad-spectral inhibitory activity against the growth of fungal. Phytotoxic effects: inhibit Arabidopsis seed germination	Promoting blood circulation and removing stasis
Group1	<i>Gynura procumbens</i>	Flavonoids and glycosides, steroids, phenolics, kaempferol, quercetin, astragalinal, chlorogenic acid, kaempferol, kaempferol- 3, 7-di-O- $\beta$ -D- glucoside, Glycoconjugates– and peptides, Essential–oils, titerpenes/steroid, bitter principles, quercetin	Exhibit antihypertensive, cardioprotective, antihyperglycemic, fertility enhancement, anticancer, antimicrobial, antioxidant, organ protective, and antiinflammatory activity. Treatment of kidney discomfort, rheumatism, diabetes mellitus, constipation, and hypertension.	Promoting blood circulation and removing stasis
Group1	<i>Kadsura coccinea</i>	Flavonol (quercetin), flavanone (naringenin), anthocyanidins (cyanidin and delphinidin), and anthocyanins (cyanidin 3-O-glucoside (kuromanin), cyanidin 3-O-galactoside (ideain), cyanidin 3-O-rutinoside (keracyanin), and cyanidin 3,5-di-O-glucoside (cyanin)), phenolic, quinic acid, lignan.	High antioxidant activities and key enzyme inhibitions, anti-oxidative agents against diabetes and Alzheimer's disease,	Promoting blood circulation and removing stasis
Group1	<i>Panax japonica</i> var major	Terpenoid, Ginsenoside Rg1, Rb1, Rc, Rd and Re, and notoginsenosideR2, Majonoside R2, Ginsenoside Ro, Chikusetsusaponin IV, Chikusetsusaponin Iva, flavonoid.	Nourish lung-yin, dissolve stasis, relieve pain and staunch bleeding. The representative chemical compounds effect on verious cancers.	Promoting blood circulation and removing stasis
Group1	<i>Panax notoginseng</i>	Ginsenoside Rg1, Rb1, Rd and Re, and notoginsenoside R1,R2, scoposide E, quercetin	Dissolve stasis, stop bleeding and alleviate swelling and pain. The representative chemical compounds effect on verious cancers.	Promoting blood circulation and removing stasis



Group1	<i>Panax stipuleanatus</i>	Qleanane-type triterpenoid, stipuleanosides R1 and R2, oleanolic acid	Tonic and bruises, bleeding, muscular pain treatment, anti-cancer. Oleanane-triterpenoids from <i>Panax stipuleanatus</i> inhibit NF-κB(NF-κB has been the target of several anti-inflammatory and anti-cancer drugs).	Promoting blood circulation and removing stasis
Group1	<i>Panax vietnamensis</i>	similar to <i>Panax ginseng</i> , contain protopanaxadiol and protopanaxatriol-type saponins, such as G-Rb1, -Rd, -Rg1, and -Re; ocotillol-type saponins; panaxynol,	Central nervous system against stress, depression, and anxiety, antitumor and hepatoprotective effects	Promoting blood circulation and removing stasis
Group1	<i>Phyllanthus reticulatus</i> Poir. var. <i>glaber</i> Muell.-Age.	The stem and leaf may contain polypeptides, sugars, tannins, organic acids, flavonoids, phenols, coumarins and lactones, steroids or triterpenoids, volatile oils and oils; the leaf may also contain anthraquinones, and the stem may also contain saponins and cardiac glycosides. Epigallocatechin-3-gallate (EGCG) and Gallic acid is the main component of anti-tumor.	Rheumatism treatment, activating blood circulation, dispersing blood stasis and detumescence	Promoting blood circulation and removing stasis
Group1	<i>Salvia miltiorrhiza</i>	Diterpenoid quinones, hydrophilic phenolic acids, and essential oils.	Toronary heart diseases and cerebrovascular diseases treatment. Possess cardiovascular and cerebrovascular effects, and the antioxidative, neuroprotective, antifibrotic, anti-inflammatory, and antineoplastic activities	Promoting blood circulation and removing stasis
Group1	<i>Smilax scobinicaulis</i> C. H. Wright	Undescribed	Undescribed	Promoting blood circulation and removing stasis
Group2	<i>Abutilon indicum</i>	Undescribed	Anti-inflammatory agent. Treatment of jaundice, piles, ulcer and leprosy, blood dysentery, fever and allergy and as an aphrodisiac. Possess analgesic, hepatoprotective, antifertility properties, antibacterial and antifungal activities.	Heat-Clearing

Group2	<i>Amaranthus tricolor</i>	Beta-cyanins, saponins, alkaloids, phenolics, and oxalates, vitamin C and A. Vitamin B6, riboflavin and foliate.	Rich antioxidant property, isoproterenol-induced oxidative stress, fibrosis, and myocardial damage. Treating diarrhea, dysentery, menorrhagia, hemorrhagic colitis, bowel hemorrhages, cough and bronchitis, with anti-tumor effect, anti-ulcer activity, hepatoprotective activity and against external inflammations and also used as a treatment in bladder distress, effective against liver cancer cell line (HepG2), breast cancer cell line (MCF-7), and colon cancer cell line.	Heat-Clearing
Group2	<i>Argyrea pierreana</i>	Undescribed	Undescribed	Heat-Clearing
Group2	<i>Artemisia lactiflora</i>	7-hydroxycoumarin, 7-methoxycoumarin, balanophonin, aurantiamide, aurantiamide acetate, isovitexin, kaempferol-3-O-beta-D-rutinoside, rutin, caffeic acid ethyl ester, quercetin, methyl 3, 5-di-O-caffeoyl quinate and methyl 3, 4-di-O-caffeoyl quinate	-	Heat-Clearing
Group2	<i>Chenopodium album</i>	Fatty Acids(Caprylic acid, Lauric acid, Myristic acid, Pentadecanoic acid, Tetradecanoic acid, 5,9,13-trimethyl- Palmitelaidic acid, Palmitic acid, Oleic acid, Margaric acid, Isooleic acid, Stearic acid, Arachidic acid, Behenic acid, Tricosylic acid); Terpenes(Dihydroactinidiolide, Neophytadiene); Phytosterols( $\beta$ -sitosterol), quercetin	Anti-inflammatory, anti-arthritic, antioxidant, antihelmintic, laxative, as a blood purifier, antirheumatic remedy, treatment of hepatic disorders, intestinal ulcers, burns, rheumatism and arthritis	Heat-Clearing
Group2	<i>Dalbergia pinnata</i>	Quinone volatile oil, flavonoids, coumarins, terpenoids, phenols and other chemical components	Treating arthritis, gonorrhea and rheumatic pains, antioxidant, anti-microbial, anti-androgenic, anti-inflammatory, anti-depressant, and enzyme inhibition properties.	Heat-Clearing

Group2	<i>Euphorbia hirta</i>	Triterpenes(2a, 2b, 3a, 3b, 3c, 3d,4a-4d), taraxerol, phytol, phytyl fatty acid esters, linoleic acid, $\beta$ -sitosterol and squalene, Epigallocatechin-3-gallate (EGCG) is the main component of anti-tumor.	Antimicrobial activities, wound healing and the treatment of boils, triterpenes 2a and 2b contribute to the anticancer activity. <i>E. hirta</i> could be used as an apoptosis-inducing anticancer agent for breast cancer treatment.	Heat-Clearing
Group2	<i>Forsythia suspensa</i>	Lignans and phenylethanoid glycosides are considered as the characteristic and active constituents of this herb, such as forsythiaside, phillyrin, rutin and phillygenin, terpenoid, flavonoid. Compared to Laoqiao, Qingqiao contains higher levels of forsythiaside, forsythoside C, comoside, rutin, phillyrin, gallic acid and chlorogenic acid and lower levels of rengyol, $\beta$ -glucose and S-suspensaside methyl ether. Arctigenin is the anti-cancer compound.	Exhibited anti-inflammatory, antioxidant, antibacterial, anti-virus, anti-cancer, anti-allergy effects, heat-clearing and detoxifying, etc, treat pyrexia, inflammation, gonorrhea, carbuncle and erysipelas.	Heat-Clearing
Group2	<i>Kummerowia striata</i>	P-coumaric acid and quercetin	Inflammation-related therapy, anti-melanogenic activity, anti-oxidant,	Heat-Clearing
Group2	<i>Mallotus apelta</i>	Coumarins, benzopyrans, flavonoids, diterpenoids, triterpenoids, steroids, alkaloids, chromene derivatives, malloapeltas C-H (1-6) and malloapelta B.	Antiviral, hepatoprotective, and cytotoxic activities, treating cancer via modulating NF- $\kappa$ B activity.	Heat-Clearing
Group2	<i>Malva verticillata</i> var. <i>crispa</i>	Undescribed	Undescribed	Heat-Clearing

Group2	<i>Malvastrum coromandelianum</i>	Steroidal saponins, saponin, diosgenin, gitogenin type steroidal saponin	Anti-diabetic, anti-inflammatory, anti-bacterial and analgesic activities, steroidal saponins stimulate lymphocyte proliferation and inhibit inflammatory cytokine production by activated macrophage. Saponin and diosgenin relieve goiter <sup>4</sup> and has protective effects on hyperlipidemic rats. Gitogenin type steroidal saponin inhibited thyroid function through the suppression of the gene transcription and expression of some proliferation-associated proteins, may be serve as a potent anti-thyroid drug.	Heat-Clearing
Group2	<i>Melia azedarach</i>	Sterols and terpenoids(triterpenoids), limonoids, benzyl 3-O-β-D-glucopyranosyl-7-hydroxybenzoate, spathulenol, 1,7,8-trihydroxy-2-naphthaldehyde, quercetin, astragalol and 2-methoxy-4-(2-propenyl)phenyl β-D-glucoside.	Antidiabetic, cytotoxic, antibacterial, anti-oxidant activities, anti-fungal, antifeedant	Heat-Clearing
Group2	<i>Paeonia anomala</i> subsp. <i>veitchii</i>	Monoterpene glycosides, tannins, phenols, paeonol and flavonoid	Anti-inflammatory, immunomodulatory, antitumor, antiviral, antibacterial, antifungal, antioxidant, hepatoprotective and neuroprotective effects Treatment of ancient internal, surgical, and gynecological diseases, has pharmacological activities such as anti-inflammatory, anti-bacterial, antiviral, anti-liver fibrosis, antitussive and expectorant, anti-tumor, anti-oxidation, and so on.	Heat-Clearing
Group2	<i>Polygonum perfoliatum</i>	Flavonoids, anthraquinones, terpenoids, phenolic acids, quercetin, phenylpropanoids, and alkaloids,	Anti-inflammatory, anti-bacterial, antiviral, anti-liver fibrosis, antitussive and expectorant, anti-tumor, anti-oxidation, and so on.	Heat-Clearing

Group2	<i>Scutellaria baicalensis</i>	Flavonoid, free flavonoids, flavonoid glycosides, phenylethanoid glycosides, steroids, diterpene, amides, phenolic.	Clearing heat, eliminating dampness, purging fire, detoxification, hemostasis, and preventing miscarriage, with anti-tumor, anti-viral, anti-microbial, anti-inflammatory, antioxidative, neuroprotective and hepatoprotective activities, widely used for the treatment of influenza, pneumonia, dysentery, cancer(liver cancer, gastric cancer, lung cancer, breast cancer, prostate cancer, bladder cancer, brain cancer, squamous cell carcinoma, mucoepidermoid carcinoma, colorectal cancer, gallbladder carcinoma, oral cancer, leukemia, lymphoma, and myeloma), cardiovascular and cerebrovascular diseases, and bones.	Heat-Clearing
Group2	<i>Senecio scandens</i>	Flavonoids, alkaloids, phenolic acids, terpenes, volatile oils, quercetin, hyperin, carotenoids, and trace element, PAs are the characteristic constituents, adonifoline is one of the index ingredients.	anti-inflammatory, antimicrobial, anti-leptospirosis, hepatoprotective, anti-infusorial, antioxidant, antiviral, antitumoral, analgesic, mutagenic, and toxicological	Heat-Clearing
Group2	<i>Sphagneticola calendulacea</i>	Flavonoids, diterpenes, triterpenes, saponins and phytosterols	Clearing away heat and toxin, cooling blood and dispersing blood stasis.	Heat-Clearing
Group2	<i>Swertia leduicii</i>	Sweriledugenin A, flavonoid, oleanolic acid	Inhibiting HBV DNA replication	Heat-Clearing
Group2	<i>Tabernaemontana divaricata</i>	Monoterpenoid indole alkaloids, ibogaine	Ibogaine could reduce organ colonization and thus beneficial for treatment of gastrointestinal <i>C. albicans</i> infections, alkaloids with significant antifungal activity.	Heat-Clearing

Group3	<i>Breynia fruticosa</i>	Zizyberanolic acid, isoceanothic acid, ursolic acid, tannins, triterpenes, sterol derivatives, flavonoid, lignins, thiacremonone, phenols, amino acid, steroid, sesquiterpenoids (breynins). Epigallocatechin-3-gallate (EGCG) is the main component of anti-tumor.	Treating gastroenteritis, sore throat, chronic bronchitis, wounds, with effect of anti-cancer, anti-arthritis, anti-inflammatory. Zizyberanolic acid and isoceanothic acid were revealed possess cytotoxic activity against five human cancer cell lines, including breast cancer MCF-7; sesquiterpenoids (breynins) have strong anti-arthritis activities and is responsible to the anti-inflammatory effects; thiacremonone reduces inflammation with the mechanism of inhibition of NF- $\kappa$ B DNA binding activity and expression of iNOS and COX-2	Rheumatism treatment
Group3	<i>Excoecaria cochinchinensis</i> Lour.	Oxygenated diterpenoids(named excolabdone D), loliolide, megastigmane glucosides, flavonoids, triterpenoids, sterols, phenolic, ursolic acid, amino acid, tannin. Epigallocatechin-3-gallate (EGCG) is the main component of anti-tumor.	Treating cancer, malaria, dysentery, furuncles, pruritus, prolonged diarrhoea, and urethrorrhagia, anti-inflammatory, inhibit HIV-1.	Rheumatism treatment
Group3	<i>Excoecaria cochinchinensis</i> Lour.	Oxygenated diterpenoids(named excolabdone D), loliolide, megastigmane glucosides, flavonoids, triterpenoids, sterols, phenolic, ursolic acid, amino acid, tannin. Epigallocatechin-3-gallate (EGCG) is the main component of anti-tumor.	Treating cancer, malaria, dysentery, furuncles, pruritus, prolonged diarrhoea, and urethrorrhagia, anti-inflammatory, inhibit HIV-1.	Rheumatism treatment
Group3	<i>Mucuna macrocarpa</i>	phenolics(tannic acid, gallic acid, and p-coumaric acid), flavonoids	Antioxidant, treating cancer, inflammatory disease, cardiovascular disorders, hypertension, hypercholesterolemia, and diabetes.	Rheumatism treatment
Group3	<i>Pinus massoniana</i> Lamb.	Volatile oil, lignans, flavonoids, shikimate, proanthocyanidins and their derivatives. Epigallocatechin-3-gallate (EGCG) is the main component of anti-tumor.	Antioxidant, antibacterial, cardiovascular protection, lipid regulation, antitumour, anti-HBV, anti-HCV	Rheumatism treatment

Group3	<i>Trachelospermum jasminoides</i>	Arctigenin, alkaloids, $\beta$ -vanillin, $\beta$ -vanillin acetate, lupeol, lupeol acetate, lupeol unsaturated fatty acid ester, $\beta$ -sitosterol, stigmasterol and rapeseed oil sterol.	Treatment for musculoskeletal soreness caused by chronic strain, osteoarthritis and osteoporosis, with bone-strengthening and anti-osteoclastogenic effect, inhibits T osteoclast differentiation through the NF- $\kappa$ B, MAPK and AKT signaling pathways. Arctigenin is the anti-cancer compound.	Rheumatism treatment
Group4	<i>Blumea riparia</i>	Undescribed monoterpenes, sesquiterpenes hydrocarbons, alkaloids and flavonoids(salvigenin, sakuranetin, isosakuranetin, kaempferide, betulenol, 2-5-7-3 tetra-o-methyl quercetagenin, tamarixetin, two chalcones and odoratin and its alcoholic compound), essential oils (geyren, bornyl acetate and $\beta$ -eubeden), saponin triterpenoids, tannins, organic acids and numerous trace substances, phenolic acids (protocatechuic, p-hydroxybenzoic, p-coumaric, ferulic and vanillic acids) and complex mixtures of lipophilic flavonoid aglycones (flavanones, flavonols, flavones and chalcones)	Undescribed	Hemostatic
Group4	<i>Chromolaena odorata</i>		Anti-inflammatory, antipyretic, analgesic, antimicrobial, cytotoxic and numerous other relevant medicinal properties on an appreciable scale, and treat various ailments.	Hemostatic
Group4	<i>Panax zingiberensis</i> C. Y. Wu et K. M. Feng	Terpenoid, Ginsenoside Rb1, Ginsenoside Rg1, Ginsenoside Rd Notoginsenoside R2, Ginsenoside Ro, Chikusetsusaponin IV	Dissolve stasis, stop bleeding and alleviate pain. The representative chemical compounds effect on various cancers.	Hemostatic
Group4	<i>Phyllodium elegans</i>	Polyphenols(Quinic acid, Gallic acid, Homogentisic acid, Protocatechuic acid, Epigallocatechin or Gallocatechin and 4-Hydroxybenzoic acid so on )	Anti-cancer properties and cytotoxicity on brain astrogloma cells (U251-MG), colorectal carcinoma cells (HCT116), and malignant melanoma cells	Hemostatic

Group4	<i>Pteris semipinnata</i>	ent-11 $\alpha$ -hydroxy-15-oxo-kaur-16-en-19-oic-acid (5F), 6 $\beta$ ,11 $\alpha$ -dihydroxy-15-oxo-ent-kaur-16-en-19-oic acid and 7 $\alpha$ ,11 $\alpha$ -dihydroxy-15-oxo-ent-kaur-16-en-19-oic acid	Anti-tumor effects(ent-11 $\alpha$ -hydroxy-15-oxo-kaur-16-en-19-oic-acid (5F)), P. semipinnata extract 5F inhibited the growth of human breast cancer cells in a time- and concentration-dependent manner, and that 5F induced apoptosis of human breast cancer cells. Treating leucorrhoea, sores, and skin irritations, antimicrobial and in vitro cytotoxic bioassay against human breast and prostate tumor cells. Leaf volatile oil demonstrated potent inhibitory activity against Hs 578T and PC-3 human breast and prostate tumor cells respectively, essential oils exhibited significant antimicrobial activity. Tonifying, replenishing, and invigorating blood as well as relieving pain, lubricating the intestines, and treating female irregular menstruation and amenorrhea, anti-inflammatory activity, antifibrotic action, antispasmodic activity, antioxidant activities, and neuroprotective action, as well as cardio- and cerebrovascular effects.	Hemostatic
Group4	<i>Solanum erianthum</i>	Essential oils( $\alpha$ -terpinolene, $\alpha$ -phellandrene, p-cymen and $\beta$ -pinene, $\alpha$ -humulene, humulene epoxide II, caryophyllene oxide, methyl salicylate $\beta$ -caryophyllene, (E)-phytol, pentadecanal pentadecane, $\alpha$ -humulene, $\beta$ -caryophyllene, ethyl palmitate, and methyl salicylate	antimicrobial and in vitro cytotoxic bioassay against human breast and prostate tumor cells. Leaf volatile oil demonstrated potent inhibitory activity against Hs 578T and PC-3 human breast and prostate tumor cells respectively, essential oils exhibited significant antimicrobial activity. Tonifying, replenishing, and invigorating blood as well as relieving pain, lubricating the intestines, and treating female irregular menstruation and amenorrhea, anti-inflammatory activity, antifibrotic action, antispasmodic activity, antioxidant activities, and neuroprotective action, as well as cardio- and cerebrovascular effects.	Hemostatic
Group5	<i>Angelica sinensis</i>	polysaccharides, ligustilide and ferulic acid	antimicrobial and in vitro cytotoxic bioassay against human breast and prostate tumor cells. Leaf volatile oil demonstrated potent inhibitory activity against Hs 578T and PC-3 human breast and prostate tumor cells respectively, essential oils exhibited significant antimicrobial activity. Tonifying, replenishing, and invigorating blood as well as relieving pain, lubricating the intestines, and treating female irregular menstruation and amenorrhea, anti-inflammatory activity, antifibrotic action, antispasmodic activity, antioxidant activities, and neuroprotective action, as well as cardio- and cerebrovascular effects.	Tonic
Group5	<i>Astragalus chinensis</i>	Formononetin, terpenoid, flavonoid, rhamnocitrin, calycosin, $\beta$ -daucosterol, rhamnocitrin-3-O- $\beta$ -d-glucoside.	Antioxidant, anti-proliferative and anti-inflammatory activities	Tonic
Group5	<i>Astragalus membranaceus</i>	Polysaccharides, flavonoids, terpenoid, and saponins	Immunomodulating, antioxidant, anti-inflammatory, and anticancer effects	Tonic
Group5	<i>Chengiopanax fargesii</i>	Undescribed	Undescribed	Tonic
Group5	<i>Cullen corylifolium</i>	Isoflavone(corylin), bakuchiol, meroterpenes, furanocoumarins, flavonoids, and terpenoid compounds (essential oil), furanocoumarins, psoralen and angelicin (isopsoralen)	Anti-ageing, anti-pigmentation, anti-acne, anti-cancer, hepatoprotective, cardioprotective, hypoglycemic, hypolipemic, antidepressant, antioxidant, anti-inflammatory and antimicrobial	Tonic



Group5	<i>Lycium chinense</i>	Polysaccharides, fatty-acid(Palmitic acid,Palmitoleic acid, Palmitoleic acid, Stearic acid, Oleic acid, Linoleic acid, Arachidic acid, $\alpha$ -Linolenic acid, Gondoic acid, Lignoceric acid), 2,2-diphenyl-1-picrylhydrazyl (DPPH) and 2,2'-azino-bis(3-ethyl-benzthiazoline-sulfonic acid) (ABTS),	Treating diabetic nephropathy by suppressing renal oxidative stress and inflammation, with antioxidant activity	Tonic
Group5	<i>Panax ginseng C. A. Meyer</i>	Ginseng saponins (ginsenosides), polyacetylenes(ferulic, cinnamic, and syringic acid), phenolic compounds (flavonoids and phenolic acids), terpenoid, essential oils, polysaccharides, microelements, and vitamins, non-saponin(phenolic acids)	Non-saponin(phenolic acids) has strong antioxidant, anticancer, antidiabetic, and immunomodulating activities. Flavonoids and their related compounds possess strong antioxidative characteristics. Vitamins are biologically active organic compounds that are essential micronutrients involved in metabolic and physiological functions in the human body.	Tonic
Group5	<i>Panax japonicus var. angustifolius</i>	Ginsenoside Rb1, Ginsenoside Re, Ginsenoside Rd Ginsenoside Rg1, Notoginsenoside R2, chikusetsusaponin IV, chikusetsusaponin IVa , chikusetsusaponin V, pseudoginsenoside RT1, Majonoside R2, Ginsenoside Ro, Chikusetsusaponin IV, Chikusetsusaponin Iva	Dissolve stasis and stop bleeding, alleviate swelling and pain, eliminate phlegm, stop coughing and act as an expectorant and tonic; feeble and strong. The representative chemical compounds effect on verious cancers.	Tonic
Group5	<i>Panax quinquefolium</i> Linn	Ginsenosides, saponins of the glycosides group, terpenoid.	Anti-cancer activity, anti-diabetic potential; antimicrobial effect. Displays anti-cancer effect by induction of apoptosis of cancer cells and reducing local inflammation.	Tonic
Group6	<i>Acmella paniculata</i>	Undescribed	Undescribed	Rsthmatics, expectorants and antitussives
Group6	<i>Aristolochia tagala</i>	Kaempferol, indomethacin, A. tagala EA	Treating rheumatic pains and fever, dyspepsia, flatulence, stomachaches, and snakebites, anti-inflammatory, also used as galactagogue and emmenagogue	Rsthmatics, expectorants and antitussives

Group6	<i>Crotalaria ferruginea</i>	Isoflavonoid(4'-hydroxy-2'-methylalpinum-isoflavone), quercetin	Anti-inflammatory, inhibitory activities against phosphodiesterase-4 (PDE4), a therapeutic target of asthma Anti-inflammatory and antioxidative activities,	Rsthmatics, expectorants and antitussives
Group6	<i>Inula japonica</i> Thunb.	Polysaccharides, essential oils, dimeric sesquiterpene lactones(japonicones, neojaponicones), luteolin, quercetagenin, 3,4-dimethyl ether, britanin, quercetin and tomentosin	control asthma, coughs, and phlegm. Luteolin, quercetagenin, 3,4-dimethyl ether, britanin, and tomentosin, have been shown to potently inhibit topoisomerase activity and cytotoxicity in A549 and HT-29 cell	Rsthmatics, expectorants and antitussives
Group7	<i>Bischofia javanica</i>	Phytochemicals viz. beta-amyrine, ursolic acid, betulinic acid, chrysoeriol, quercetin, friedelan-3-one, beta-sitosterol, fisetin, cynaroside and triacontane	Anti-diabetic, antileukemic, antiparasitic, antimicrobial, anti-inflammatory, and antinociceptive activities, treatment of various chronic conditions like inflammation, tuberculosis, ulcer, fracture, dislocation, diarrhea, sore throat, and nervous disorder	Water-disinhibiting and damp-percolating
Group7	<i>Humulus scandens</i>	Flavonoids	Treat tuberculosis, dysentery and chronic colitis, inhibit the proliferation of splenocytes induced by concanavalin A, lipopolysaccharides, and mixed-lymphocyte reaction in vitro.	Water-disinhibiting and damp-percolating
Group7	<i>Polygonum aviculare</i>	Quercitrin hydrate, caffeic acid, quercetin and rutin. Epigallocatechin-3-gallate (EGCG) is the main component of anti-tumor.	Antioxidant, anti-obesity, wound healing,	Water-disinhibiting and damp-percolating
Group8	<i>Cyperus rotundus</i>	Essential oils, phenolic acids, ascorbic acids, terpenoid and flavonoids in the tuber and rhizomes.	Treating cancer, diarrhea, diabetes, pyresis, inflammation, malaria, and stomach and bowel disorders, used as antiandrogenic, antibacterial, anticancerous, anticonvulsant, antidiabetic, antidiarrheal, antigenotoxic, anti-inflammatory, antilipidemic, antimalarial, antimutagenic, antiobesity, antioxidant, anti-uropathogenic, hepatoprotective, cardioprotective, neuroprotective, and nootropic agent.	Qi-regulating

Group8	Fruitlet of <i>Citrus aurantium</i> L.	Limonene, linalool, and $\beta$ -myrcene, alkaloid(p-synephrine), flavanones	Anticancer, antianxiety, antiobesity, antibacterial, antioxidant, pesticidal, and antidiabetic	Qi-regulating
Group8	Immature ruit of <i>Citrus aurantium</i> L.	Five flavanones and two polymethoxyflavones were isolated and evaluated for inhibitory activity against xanthine oxidase in vitro. Of the compounds, hesperetin showed more potent inhibitory activity	C. aurantium dried immature fruits showed the highest xanthine oxidase inhibitory activity	Qi-regulating
Group9	<i>Entada phaseoloides</i>	Triterpene(entagenic acid), triterpene saponins, homogentisic acid and entadamide A, rheediinosides A and B, phenolic compounds and flavonoids	treat skin diseases, anti-complement, rheediinosides A and B showed moderate anti-proliferative and antioxidant activity	Heat-clearingastrigent
Group9	<i>Myristica fragrans</i>	Lignans, neolignans, diphenylalkanes, phenylpropanoids, and terpenoids. Macelignan, meso-dihydroguaiaretic acid, myristicin, and malabaricone C are the most active compounds. mace, nutmeg, and essential oils are three major commercial products	As a remedy for strengthening the stomach and expelling "wind-evil", and as an alleged abortifacient and narcotic. Mace is used to treat humoral asthma, low-grade fever, and to alleviate gastrointestinal complaints when mixed with aromatics. Nutmeg has been used medicinally to treat diarrhea, rheumatism, headaches, psychosis, fever, bad breath, nausea, stomach cramps, chronic vomiting, hemorrhoids, and to stimulate appetite, and to control flatulence. Nutmeg oil is used for the treatment of rheumatism, diarrhea, cholera, intestinal disorders, stomach cramps, and flatulence, and to dissolve kidney stones and alleviate infections of the kidney.	Heat-clearingastrigent
Group9	<i>Schisandra chinensis</i>	Lignans	With adaptogenic effects, central nervous system stimulation, hepatoprotective effects and potential anticancer potential and treat various neurodegenerative diseases.	Heat-clearingastrigent

Group10	<i>Gelsemium elegans</i>	Alkaloids(19,2--Epoxyhumantenine, (4R)-19-oxo-gelsevirine N4-oxide, gelsedethenine, 1-,11-dimethoxy-N1-demethoxy-gelsemamide, 11-demethoxy-gelsemazonamide ), six types of indole alkaloids(sarpagine, koumine, humantenine, gelsedine, gelsemine, and yohimbane-type),	Treat diseases such as pain, skin ulcers, and spasticity. With antitumor, anti-inflammatory, analgesic and antidepressant activities	Detoxifying, analgesia, antipruritic
Group10	<i>Ricinus communis</i>	Fatty acid ricinoleic acid, castor oil	Treatment of infection and inflammation, a valued industrial raw material for lubricants, paints, coats, cosmetic products	Detoxifying, analgesia, antipruritic
Group11	<i>Arctium lappa</i>	Tannin, arctigenin, arctiin, beta-eudesmol, caffeic acid, chlorogenic acid, inulin, trachelogenin 4, sitosterol-beta-D-glucopyran- oside, lappaol and diarctigenin	"detoxify" blood in terms of TCM and promote blood circulation to the skin surface, improving the skin quality/texture and curing skin diseases like eczema. Antioxidants and antidiabetic, anti-inflammatory effects and potent inhibitory effects on the growth of tumors such as pancreatic carcinoma, treating chronic diseases such as cancers, diabetes and AIDS. Arctigenin is the anti-cancer compound.	Unclassified
Group11	<i>Cornus macrophylla</i>	Alkaloids, steroids, terpenoids, flavonoids, reducing sugars, and tannins	Treat backache, jaundice, and stomach ulcers, with antifungal, antibacterial, and antioxidant activities, exhibited a strong inhibition of aldose reductase, and it may be a potential candidate for the treatment of diabetic retinopathy	Unclassified
Group11	<i>Glycosmis pentaphylla</i>	Undescribed	Undescribed	Unclassified
Group11	<i>Ligustrum confusum</i>	Undescribed	Undescribed	Unclassified
Group11	<i>Mallotus barbatus</i>	Undescribed	Undescribed	Unclassified
Group11	<i>Platycodon grandiflorus</i>	Steroidal saponins, flavonoids, polyacetylenes, sterols, phenolics, terpenoid, and other bioactive compounds	Treatments of cough, phlegm, sore throat, lung abscess, chest pain, dysuria, and dysentery, with anti-inflammatory, immunostimulatory, anti-tumor, anti-oxidant, anti-diabetic, anti-obesity, hepatoprotective and cardiovascular system effects	Unclassified

Group11	<i>Ricinus communis</i> L.	Ricin, Ricinin, p-Coumaric acid, Epigallocatechin and Ricinoleic acid	Hepatoprotective, anti-inflammatory, diuretic, anti-cancer, anti-bacterial, insecticidal, hypoglycemic, laxative, abortifacient, for wounds, ulcers and free radical scavenging, anthelmintic	Unclassified
Group11	<i>Sesbania bispinosa</i>	Undescribed	Undescribed	Unclassified
Group11	<i>Sesbania bispinosa</i>	Undescribed	Undescribed	Unclassified
Group11	<i>Solanum aculeatissimum</i>	Chlorogenic, ferulic acids, orientin, quercitrin and, quercetin, steroidal alkaloids, pyridines, withanolides, sesquiterpenes and diterpenes, glycoalkaloids and flavonoids	With cytotoxic, antifungal and antitumor effects	Unclassified
Group11	<i>Solanum melongena</i>	Undescribed	Undescribed	Unclassified
Group11	<i>Zanthoxylum bungeanum Maxim.</i>	Undescribed	Undescribed	Unclassified
Group12	Cabozantinib	-	It is a small molecule and potent receptor inhibited many tyrosine kinases, such as MET, RET, vascular endothelial growth factor receptor 2 (VEGFR2) and other receptor tyrosine kinases, which play an important role in multiple tumors' angiogenesis, invasion and metastasis, including breast cancer.	Positive controls
Group12	cis-Platinum 1	-	inhibit the DNA replication process of cancer cells and damage the structure of cell membrane, and has a strong broad-spectrum anti-cancer effect	Positive controls
Group12	cis-Platinum 2	-	inhibit the DNA replication process of cancer cells and damage the structure of cell membrane, and has a strong broad-spectrum anti-cancer effect	Positive controls
Group12	Docetaxel	-	It is an antimicrotubulin agent through perturbing microtubule dynamics, leading to chronic activation of the spindle assembly checkpoint and inhibition of the anaphase promoting complex that delays the degradation of cyclin B1 and inhibits mitotic exit.	Positive controls

Group12	Doxorubicin hydrochloride	-	Used for early and advanced breast cancer. Its mechanism of anticancer effect is intercalation into DNA and the subsequent disruption of topoisomerase-II-mediated DNA repair. It also involves oxidative stress to cellular membranes, DNA and proteins	Positive controls
Group12	Gefitinib	-	It is used as second-line treatment of NSCLC after cytotoxic therapies, treatment of ERBB1-mutant lung cancer, induce the growth inhibition of endocrine-resistant MCF-7 breast cancer cells via reducing AKT and MAPK phosphorylation, and produced a synergistic effect with tamoxifen administration	Positive controls
Group12	Gemcitabine	-	It is a nucleoside analog chemotherapy which is widely used for different types of neoplasia and was clinically approved for the treatment of metastatic breast cancer. It requires triphosphate activation to get incorporated into DNA double helix resulting in inhibition of DNA synthesis. In chemotherapy strategy of breast cancer, gemcitabine always beening used with cisplatin or paclitaxel to perform better effect.	Positive controls
Group12	Lenvatinib	-	It is a small-molecule tyrosine kinase inhibitor contributed to tumor angiogenesis by inhibiting function of multiple receptors, including vascular endothelial growth factor receptor (VEGFR1-3), fibroblast growth factor receptor (FGFR1-4), platelet-derived growth factor receptor a (PDGFRa), stem cell factor receptor (KIT), and rearranged during transfection (RET).	Positive controls

Group12	Paclitaxel 1	-	<p>It is a very prominent cytotoxic agent and widely used as first line therapy (alone or in combination) for many common and recurrent malignancies (lung, breast, ovarian and head and neck cancer). it's reported that PTX can inhibit primary tumor progress and protects against angiogenesis and late-stage metastasis</p>	Positive controls
Group12	Paclitaxel 2	-	<p>It is a very prominent cytotoxic agent and widely used as first line therapy (alone or in combination) for many common and recurrent malignancies (lung, breast, ovarian and head and neck cancer). it's reported that PTX can inhibit primary tumor progress and protects against angiogenesis and late-stage metastasis</p>	Positive controls
Group12	Sorafenib	-	<p>A small-molecule agent that inhibits multiple kinases in vitro, including B-RAF, CRAF, VEGFR2, VEGFR3, PDGFR-b, FLT-3 and c-KIT. It disrupts Ras-MAPK and VEGFR signaling to the treatment of colon, kidney, lung and breast cancer with the mechanism of inhibiting proliferation and angiogenesis. It reported combined sorafenib with gemcitabine and/or capecitabine performing better efficacy than sorafenib monotherapy or with taxanes and bevacizumab in breast cancer treatment.</p>	Positive controls

Group12	Sorafenib	-	<p>A small-molecule agent that inhibits multiple kinases in vitro, including B-RAF, CRAF, VEGFR2, VEGFR3, PDGFR-b, FLT-3 and c-KIT. It disrupts Ras-MAPK and VEGFR signaling to the treatment of colon, kidney, lung and breast cancer with the mechanism of inhibiting proliferation and angiogenesis. It reported combined sorafenib with gemcitabine and/or capecitabine performing better efficacy than sorafenib monotherapy or with taxanes and bevacizumab in breast cancer treatment.</p> <p>It is an antimitotic anticancer and microtubule destabilizing agent for treatment of lung cancer and breast cancer by inhibiting microtubule dynamics to promote a mitotic arrest and cell death, its main targets are tubulin and microtubules. Besides, Vinorelbine inhibited the cancer cell proliferation by MTT and colony formation assays and inducing G2/M arrest and cell apoptosis via regulation of Bax, Bcl-2, and Bcl-xL.</p> <p>It is an antimitotic anticancer and microtubule destabilizing agent for treatment of lung cancer and breast cancer by inhibiting microtubule dynamics to promote a mitotic arrest and cell death, its main targets are tubulin and microtubules. Besides, Vinorelbine inhibited the cancer cell proliferation by MTT and colony formation assays and inducing G2/M arrest and cell apoptosis via regulation of Bax, Bcl-2, and Bcl-xL.</p>	Positive controls
Group12	Viborelbine	-	<p>It is an antimitotic anticancer and microtubule destabilizing agent for treatment of lung cancer and breast cancer by inhibiting microtubule dynamics to promote a mitotic arrest and cell death, its main targets are tubulin and microtubules. Besides, Vinorelbine inhibited the cancer cell proliferation by MTT and colony formation assays and inducing G2/M arrest and cell apoptosis via regulation of Bax, Bcl-2, and Bcl-xL.</p> <p>It is an antimitotic anticancer and microtubule destabilizing agent for treatment of lung cancer and breast cancer by inhibiting microtubule dynamics to promote a mitotic arrest and cell death, its main targets are tubulin and microtubules. Besides, Vinorelbine inhibited the cancer cell proliferation by MTT and colony formation assays and inducing G2/M arrest and cell apoptosis via regulation of Bax, Bcl-2, and Bcl-xL.</p>	Positive controls
Group12	Viborelbine	-	<p>It is an antimitotic anticancer and microtubule destabilizing agent for treatment of lung cancer and breast cancer by inhibiting microtubule dynamics to promote a mitotic arrest and cell death, its main targets are tubulin and microtubules. Besides, Vinorelbine inhibited the cancer cell proliferation by MTT and colony formation assays and inducing G2/M arrest and cell apoptosis via regulation of Bax, Bcl-2, and Bcl-xL.</p> <p>It is an antimitotic anticancer and microtubule destabilizing agent for treatment of lung cancer and breast cancer by inhibiting microtubule dynamics to promote a mitotic arrest and cell death, its main targets are tubulin and microtubules. Besides, Vinorelbine inhibited the cancer cell proliferation by MTT and colony formation assays and inducing G2/M arrest and cell apoptosis via regulation of Bax, Bcl-2, and Bcl-xL.</p>	Positive controls
Group13	Control 1	-	-	Negative controls
Group13	Control 2	-	-	Negative controls
Group13	Control 8	-	-	Negative controls
Group13	Control 9	-	-	Negative controls

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Supplemental Table 7 Hub gene list

Module	Gene name
green	RAB3B
	DUSP4
	C11orf91
	TMEM158
	IRAK2
	BMERB1
	PLAU
	PLEK2
	KCNJ16
	TM4SF20
darkgrey	NPAS2
	MYORG

The filtered nodes of green module (weight > 0.13)

fromNode	toNode	weight
CCDC198	ETS1	0.130026839
APBB1IP	FOXO1	0.130070104
FAM83A	RAB3B	0.130072371
PTPRH	TPBG	0.130085683
CDCP1	EOMES	0.130159367
SOCS2-AS1	TMEM158	0.130188214
FOXL1	IRAK2	0.130240608
OSBP2	RAB3B	0.130253772
SLC25A37	SMURF2	0.130258256
C11orf91	IFNGR2	0.130262147
FOXL1	RAB3B	0.130293609
APBB1IP	MARCHF4	0.130325585
C11orf91	SQOR	0.130349806
BMERB1	SEMA4B	0.130360535
IRAK2	IRF2BPL	0.130389125
HRH1	OLR1	0.130421149
CHST11	RAB3B	0.130441352
COTL1	PXN	0.130454701
KIAA1549L	TMEM158	0.130460936
BMERB1	LOC105371123	0.130488795
CHST11	HRH1	0.130496101
KCNN4	MARCHF4	0.130514323

SMURF2	TMEM156	0.130524966
CDCP1	DRAIC	0.130538901
C11orf91	PDGFB	0.130572378
ITGB8	SERPINB7	0.130632207
IRAK2	SLC35F3	0.130698282
CACNG8	ETS1	0.13070102
ARID5B	IRAK2	0.130723681
PLAUR	PLEK2	0.130735447
HRH1	PDGFB	0.130741219
ETS1	MEAK7	0.13078729
ETS1	TMEM156	0.130885352
CHST11	SFRP4	0.130919859
MEAK7	OSBP2	0.130996789
PLEK2	SLC23A1	0.131033422
BMERB1	RAB3B	0.131044879
LOC107987457	RAB3B	0.131051264
CACNG6	CDCP1	0.131058483
MEAK7	TOR4A	0.131061609
FOXO1	MARCHF4	0.131083825
C11orf91	SPTB	0.131182222
CHST11	MYO1A	0.131210799
KRT15	TMEM158	0.131249076
IRAK2	LOC101927751	0.131252754
MARCHF4	VIL1	0.131269187
MUC16	SERPINB7	0.13131928
C11orf91	ETS1	0.131365264
ETS1	MARCHF4	0.131378007
DDC	TPBG	0.131380087
C11orf91	XDH	0.131401019
PPP1R18	SMURF2	0.131439203
CDCP1	SLC7A7	0.131473303
CDCP1	ITGB4	0.131486506
CDCP1	SP6	0.131564387
CFLAR	ETS1	0.131600308
MEAK7	PEAR1	0.131601378
P3H2	SMURF2	0.13162835
TMEM158	TPBG	0.131674804
CDCP1	PLXNC1	0.131684356
SMURF2	TPBG	0.13169958
C11orf91	CD9	0.13170579
CTSL	IRAK2	0.131770688
SERPINB7	TMOD1	0.131790328

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LINC00941	TMEM158	0.131807233
DDX58	TMOD1	0.131899905
SH3BP4	SMURF2	0.131917297
SFRP4	TMEM158	0.131988315
CDCP1	EFR3B	0.131993843
EFR3B	PLEK2	0.13199805
ANXA13	SLC23A1	0.132049992
MEAK7	PTPRH	0.132051236
EFR3B	IRAK2	0.132066308
APOH	MEAK7	0.132082719
HDAC5	PTPRH	0.13208761
MARCHF4	PTPRH	0.132104323
MYO1A	TMEM158	0.132155599
CHST11	EPHB2	0.132175406
PTPRH	ZNF185	0.132192261
IRAK2	MT2A	0.132194181
MEAK7	SMURF2	0.132211182
BMERB1	SOCS2	0.132211585
FOXO1	GPR176	0.132275366
MT2A	PLEK2	0.132292708
ACACB	C11orf91	0.132316438
DDC	PLEK2	0.132363813
CACNG6	MEAK7	0.132411958
CHST11	HGD	0.132426942
BCAS1	CHST11	0.132455865
MEAK7	PDGFB	0.132490188
RAB3B	TMCC2	0.132498297
MYO1A	PLEK2	0.132500387
BMERB1	TPBG	0.132585245
CLMP	ETS1	0.132591508
BMERB1	UNC13A	0.132633115
BMERB1	TOR4A	0.132636326
IRAK2	KRT15	0.132638489
PDGFB	TMEM158	0.132646634
AFAP1L2	CDCP1	0.132648127
ETS1	PLEK2	0.132733602
BMERB1	MT2A	0.132738563
RPL22P2	SLC23A1	0.132745041
BMERB1	CTSL	0.132813892
C11orf91	GPR176	0.132881512
ANXA10	RAB3B	0.132907649
BCAS1	SLC23A1	0.132953207

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FOXO1	P3H2	0.132971092
SQOR	TPBG	0.132976018
SMURF2	TBC1D8	0.133006065
AFAP1L2	C11orf91	0.133061051
GAS2	TMEM158	0.133125185
EFR3B	TPBG	0.133143987
CDCP1	LOC107987457	0.133154925
GLI2	SMURF2	0.133241812
AREG	ETS1	0.133270616
C11orf91	HGD	0.133279428
DNAH17	IRAK2	0.133305089
BMERB1	EOMES	0.133307591
IRAK2	SFRP4	0.133310852
IFNGR2	IRAK2	0.133334198
FOXO1	HMGA2	0.133387572
EPHB2	KIAA1549L	0.13339022
IRAK2	SH3KBP1	0.13339716
PLEK2	TPBG	0.13339923
SLC35G2	SMURF2	0.133404071
HRH1	PPP1R18	0.133435697
AFAP1L1	C11orf91	0.133471307
MEAK7	SOCS2-AS1	0.13349137
RAB3B	TPBG	0.133534174
HRH1	MB	0.133582163
IRAK2	TMEM37	0.13358379
HRH1	KRT15	0.133663482
PEAR1	PLEK2	0.13366449
SERPINB7	SPTB	0.133665406
ARID5B	MARCHF4	0.133684091
IRAK2	SP6	0.133707629
AFAP1L1	IRAK2	0.133752656
LOC101927751	MEAK7	0.133869126
LAMC2	SMURF2	0.133973671
ANXA10	PLEK2	0.133975828
DDC	TMEM158	0.133979765
CACNG6	IRAK2	0.134046378
SFR1	SMURF2	0.134055116
PLEK2	RAB3B	0.134104231
IRAK2	PHLDA1	0.134118657
BCAS1	PLEK2	0.134141533
MYH16	SERPINB7	0.134143556
CDCP1	RAB3B	0.13414407

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LAMC2	TMEM158	0.134179418
MEAK7	PPP1R18	0.134191077
BMERB1	TMC5	0.134210121
ADH6	SLC23A1	0.134228817
BMERB1	DUSP4	0.134230961
PLAT	RAB3B	0.13426901
CHST11	TPBG	0.13430383
PEAR1	SMURF2	0.134310233
MEAK7	RPL22P2	0.13433487
CDCP1	PXN	0.134370941
CDCP1	SOCS2-AS1	0.134399619
CFLAR	IRAK2	0.134420781
ARID5B	C11orf91	0.134488536
CDCP1	HMGA1	0.134513111
CDCP1	SP100	0.13455244
C11orf91	HDAC5	0.134558006
FOXC2	SMURF2	0.134598618
HRH1	LOC107987457	0.134627122
LOC105375517	RAB3B	0.13465337
C11orf91	CHST11	0.134654196
IRAK2	TPBG	0.134700847
DHRS9	IRAK2	0.134713287
RIN2	SMURF2	0.134729196
MARCHF4	ZNF185	0.134758207
AFAP1L1	TPBG	0.134760071
CDCP1	MT2A	0.134817437
ARID5B	SMURF2	0.134851074
AFAP1L1	PLEK2	0.134880124
CDCP1	OPTN	0.134908913
DSE	GPR176	0.134941675
BMERB1	SLC7A7	0.134991631
MARCHF4	MEAK7	0.135011976
PTGES	TMEM158	0.135035204
ETS1	SLC7A7	0.13504535
APBB1IP	HRH1	0.135116263
KIAA1549L	LAMC2	0.135238291
CDCP1	SEMA7A	0.135254136
BCO1	ETS1	0.135311906
ETS1	TMEM158	0.135316284
IRAK2	RAB3B	0.135387949
BMERB1	DDC	0.135428262
HGD	HRH1	0.135444186

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CHST11	TMEM158	0.135537161
HMGA2	MARCHF4	0.135537373
FOXL1	PLEK2	0.135553457
SMURF2	UNC13A	0.135568348
CDCP1	LOC105374986	0.135581771
BIK	RAB3B	0.135648217
RAB3B	STC1	0.135654744
BMERB1	PLXNC1	0.13565477
LOC107987457	TMEM158	0.135657801
BMERB1	HMGA1	0.135669218
CDCP1	LOC107986160	0.135669661
ETS1	KIRREL1	0.135732366
CDCP1	THBD	0.135777254
PLAU	SMURF2	0.135789669
INA	MEAK7	0.13580119
CHST11	DHRS9	0.135811411
C11orf91	HECW2	0.135811997
KIAA1549L	SFRP4	0.135844365
C11orf91	SERPINB7	0.135867611
C11orf91	PTGES	0.135914845
HGD	TMEM158	0.135960524
CHST11	ETS1	0.135965888
LOC105371123	SMURF2	0.13599302
PLEK2	SQOR	0.136013241
PLAU	TPBG	0.136018385
ETS1	KIAA1549L	0.136028137
BMERB1	PLAUR	0.13604561
ETS1	HRH1	0.136055773
C11orf91	FOXO1	0.136095254
CCDC198	HRH1	0.13616362
CDCP1	SLC35F3	0.136177813
BMERB1	TMEM37	0.136244761
MARCHF4	P3H2	0.136249106
BMERB1	PXN	0.136349269
RAB3B	TMEM158	0.136360276
EFHD2	RAB3B	0.136364531
C11orf91	PLAU	0.136446345
LINC01697	SMURF2	0.136493462
IRAK2	RERG	0.13653792
CACNG8	IRAK2	0.136576426
BMERB1	ITGA3	0.136598441
MAML2	RAB3B	0.136616054

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EPHB2	IRAK2	0.136622415
CDCP1	FOXB1	0.13664514
DKK3	RAB3B	0.13666264
PLAU	TMEM158	0.136668215
DSE	SPTB	0.136681295
CDCP1	DDC	0.136737242
BMERB1	MB	0.13674013
ETS1	TFPI2	0.136764969
CTSL	ETS1	0.136787372
MEAK7	TMEM158	0.136805652
DHRS9	TPBG	0.136834568
BMERB1	LOC105374986	0.136838127
MIR100HG	SMURF2	0.136876118
PXN	TOR4A	0.136877019
ETS1	SH3KBP1	0.136899031
AFAP1L2	IRAK2	0.136953907
APOH	SMURF2	0.136983247
BMERB1	EPHB2	0.137015216
C11orf91	TPBG	0.13701729
BMERB1	PHLDA1	0.137047965
CDCP1	KRT15	0.137053097
HRH1	KCNN4	0.137065211
FOXO1	SPTB	0.137081646
CDCP1	CTSL	0.137106423
IRAK2	PXN	0.13716775
CA8	RAB3B	0.137243383
AXL	CDCP1	0.137243783
C11orf91	EFR3B	0.137314122
ANXA3	SMURF2	0.137368853
SLC23A1	VIL1	0.137412083
CHST11	FOXL1	0.137421362
IRAK2	PDGFB	0.137438569
HRH1	OSBP2	0.137486901
BCO2	CDCP1	0.137494551
MARCHF4	RPL22P2	0.137588178
AKR1B10	AKR1B15	0.137596111
HECW2	HRH1	0.137601078
RAB3B	SOX13	0.137646857
KRT15	RAB3B	0.137662139
BMERB1	DHRS9	0.13768652
A1CF	BMERB1	0.137719134
ANXA13	SMURF2	0.137739237

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HRH1	ZNF185	0.137755568
PPP1R18	TMEM158	0.137785432
IRAK2	SQOR	0.137788133
BMERB1	PDGFB	0.137808394
C11orf91	DDC	0.137900347
C11orf91	HMGA2	0.137952564
GPRC5A	RAB3B	0.138000027
DSE	SERPINB3	0.1380877
FOXL1	TPBG	0.138203218
ALDH1A3	SMURF2	0.138233178
LAMC2	RAB3B	0.138241525
APOLD1	CDCP1	0.138282995
MEAK7	UNC13A	0.138309112
HRH1	VIL1	0.138339745
DUSP4	SMURF2	0.138432145
MARCHF4	OLR1	0.138486476
BMERB1	PEAR1	0.138525514
CHST11	RPL22P2	0.138557153
ADH6	SMURF2	0.138558548
IRAK2	TMC5	0.138590119
CHST11	MARCHF4	0.138597966
C11orf91	CA8	0.138663881
FOXO1	SMURF2	0.138668639
LAMC2	TPBG	0.138680238
CDCP1	SEMA4B	0.138684833
MEAK7	PXN	0.138733876
SMURF2	STAMBPL1	0.138747061
DDX58	RAB3B	0.138760168
BCAS1	SMURF2	0.13882196
CDCP1	MEAK7	0.138825331
CDCP1	ETS1	0.13889033
CTSL	SMURF2	0.13893775
LOC105374003	SMURF2	0.138938448
ETS1	VIL1	0.139038827
EGR1	JUN	0.139059455
C11orf91	LOC107987457	0.139086494
IRAK2	LOC107987457	0.13911227
HGD	PLEK2	0.13911793
AHNAK2	CDCP1	0.139189333
BCAS1	ETS1	0.139189532
CA8	IRAK2	0.139192359
HBEGF	IRAK2	0.13926613



CACNG8	SMURF2	0.139283965
IRAK2	MEAK7	0.139353701
HRH1	RAB3B	0.139461508
CHST11	VIL1	0.139475466
CDCP1	PEAR1	0.139532447
MIR100HG	RAB3B	0.139575068
RAB3B	RASA4DP	0.139597336
BMERB1	SFRP4	0.139670176
OLR1	RAB3B	0.139681635
ANKS4B	PLEK2	0.139743939
HRH1	MEAK7	0.139790222
ETS1	IRAK2	0.1398295
CDCP1	SOCS2	0.139831439
MEAK7	PLEK2	0.139870036
CHST11	PLEK2	0.139905154
C11orf91	KCNN4	0.139917657
IGF2	RAB3B	0.139949854
ARID5B	HRH1	0.139952209
RPL22P2	TPBG	0.139955544
AFAP1L1	BMERB1	0.140124602
RASSF2	SMURF2	0.140158507
C11orf91	MEAK7	0.140177726
C11orf91	LAMC2	0.140288426
KIAA1549L	PLAU	0.14041012
EOMES	HRH1	0.140415106
C11orf91	P3H2	0.140441183
ETS1	HECW2	0.140585685
BMERB1	CACNG8	0.140643575
ANKS4B	C11orf91	0.140672254
ARHGAP31	RAB3B	0.140690655
RAB3B	SERPINB3	0.1406937
ANG	SLC23A1	0.140711386
LOC107987457	PLEK2	0.140745561
ANG	ETS1	0.140759888
CDCP1	PHLDA1	0.140866273
BMERB1	GAS2	0.14095646
CDCP1	SLC25A37	0.140979166
PLEK2	PTPRH	0.140995828
ETS1	TNFRSF21	0.141127656
COL17A1	RAB3B	0.141196814
HMGA2	SMURF2	0.141248154
MUC16	SPTB	0.14127578

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DHRS9	PLEK2	0.141305583
PLEK2	PPP1R18	0.141322128
CDCP1	OSBP2	0.141343153
C11orf91	PPP1R18	0.14144255
DSE	ITGB8	0.141458252
ETS1	LINC01697	0.14148901
C11orf91	ZNF185	0.14152357
PTPRH	RAB3B	0.141567767
C11orf91	OSBP2	0.141676812
ETS1	HGD	0.141679263
BMERB1	SQOR	0.141924227
PAQR5	SMURF2	0.141954274
ANXA13	ETS1	0.142030635
IRAK2	UNC13A	0.142036591
ETS1	PAQR5	0.142042668
BMERB1	CACNG6	0.14206148
CDCP1	SH3KBP1	0.142092597
IRAK2	SOCS2-AS1	0.142109456
BCAS1	TMEM158	0.142122199
BMERB1	SOCS2-AS1	0.142167418
ADH6	IRAK2	0.142247041
CD274	RAB3B	0.142255775
FOXO1	HRH1	0.14235052
OSBP2	TMEM158	0.142353948
IRAK2	LAMC2	0.142509393
CDCP1	ITGA3	0.142647883
BMERB1	LOC107987457	0.14266459
CDCP1	LOC105374003	0.142685165
HRH1	PTPRH	0.142717483
IRAK2	SLC23A1	0.142726287
ICAM1	IRAK2	0.142729112
AFAP1L1	CDCP1	0.142732726
GPR176	TMOD1	0.142753632
BMERB1	MEAK7	0.142759716
HRH1	UNC13A	0.142815151
SMURF2	TMC5	0.142914225
BMERB1	INA	0.143006858
CXCL2	CXCL3	0.143044845
IRAK2	PEAR1	0.143085055
IRAK2	LINC01697	0.143100824
CCDC9B	RAB3B	0.143153708
ETS1	SOCS2	0.143165916

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HRH1	TMEM158	0.143255454
RAB3B	VEGFC	0.143415556
CDCP1	SMURF2	0.143441465
PLEK2	TMEM158	0.143518422
LINC00941	MEAK7	0.143650881
CD274	DSE	0.14366817
BMERB1	KRT15	0.14374935
HRH1	PLEK2	0.143753921
CDCP1	PAQR5	0.143784188
MB	TMEM158	0.143896629
BMERB1	HECW2	0.143944559
C11orf91	KRT15	0.143968219
ETS1	TMC5	0.143998334
CDCP1	PLAUR	0.144060178
PLEK2	VIL1	0.144075071
CHST11	LAMC2	0.144080135
DUSP4	IRAK2	0.144083065
DSE	MYH16	0.144142385
AKR1B10	RAB3B	0.144176673
LAMC2	PLEK2	0.144181853
CDCP1	HECW2	0.144356534
SMURF2	TNFRSF21	0.144508731
CHST11	KIAA1549L	0.144653391
RERG	TMEM158	0.144667465
C11orf91	VIL1	0.144684696
PHLDA1	SMURF2	0.144708332
IRAK2	SOCS2	0.144833103
BMERB1	KIAA1549L	0.144849294
CA8	HRH1	0.144958923
APBB1IP	RAB3B	0.145034333
C11orf91	RAB3B	0.145043189
LTBP2	RAB3B	0.145050457
APOH	ETS1	0.145257252
ADH6	ETS1	0.145338162
EOMES	IRAK2	0.14534174
C11orf91	PLEK2	0.145360792
LOC728975	RAB3B	0.145451364
BMERB1	LAMC2	0.145460828
ETS1	STAMBPL1	0.145525742
CDCP1	PSMD10P2	0.145559198
IRAK2	OSBP2	0.145580079
APOH	IRAK2	0.145595318

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SMURF2	TMEM158	0.145652103
ETS1	PHLDA1	0.145660799
SMURF2	TFPI2	0.145756115
PITPNC1	RAB3B	0.146095914
DSE	RAB3B	0.146311639
CACNG8	CDCP1	0.1463404
CDCP1	INA	0.14641832
ANG	SMURF2	0.146499552
ETS1	SLC35F3	0.146562467
BMERB1	OSBP2	0.146601011
ANXA3	ETS1	0.146618249
PLEK2	SMURF2	0.146669745
SLC35F3	SMURF2	0.146756893
SLC7A7	SMURF2	0.146806111
HGD	SLC23A1	0.14696476
RAB3B	RPL22P2	0.147040881
BMERB1	ETS1	0.147075675
PLAU	PLEK2	0.147099961
C11orf91	MB	0.147247874
HECW2	IRAK2	0.147287567
IRAK2	KIAA1549L	0.147293979
RAB3B	TCIM	0.147490507
CD9	RAB3B	0.147497887
ETS1	SLC23A1	0.147583538
CDCP1	TMEM37	0.147713492
KIRREL1	SMURF2	0.147770983
CCDC198	SMURF2	0.147771826
HMGA2	HRH1	0.147854179
CHST11	PLAU	0.147958108
SMURF2	TMEM37	0.148043453
CDCP1	FOXL1	0.148053466
BMERB1	SLC23A1	0.148111943
CDCP1	DUSP4	0.148175819
C11orf91	TMEM158	0.14819112
BMERB1	RERG	0.148409437
HGD	IRAK2	0.14853323
CDCP1	PPP1R18	0.148550467
CHST11	IRAK2	0.148574635
ETS1	SMURF2	0.148604263
SLC23A1	SLC7A7	0.148668966
HRH1	P3H2	0.1487745
IRAK2	SMURF2	0.1488995

DDC	RAB3B	0.148902189
INA	IRAK2	0.149115793
ANKS4B	CDCP1	0.149188974
IRAK2	PPP1R18	0.14923455
CDCP1	SLC23A1	0.149287129
C11orf91	SMURF2	0.149394436
MB	RAB3B	0.149468875
BMERB1	CHST11	0.149496091
KRT15	PLEK2	0.149548629
MARCHF4	PLEK2	0.149938109
BMERB1	SMURF2	0.149983953
CDCP1	DHRS9	0.15011006
CDCP1	TPBG	0.150151585
MB	PTPRH	0.15019348
MYO1A	SLC23A1	0.150216142
ANKS4B	TMEM158	0.150287276
LOC101927789	RAB3B	0.150358673
CDCP1	SQOR	0.150390908
HDAC5	RAB3B	0.150461914
C11orf91	HRH1	0.150600846
CDCP1	HRH1	0.150660138
RPL22P2	TMEM158	0.150748529
RAB3B	ZSWIM4	0.151083918
CDCP1	PTPRH	0.151193979
CDCP1	RERG	0.151469697
RAB3B	TSPAN5	0.151533156
CA8	SMURF2	0.15179252
BMERB1	PPP1R18	0.151881484
ETS1	INA	0.152031283
RAB3B	TMOD1	0.152092022
CFLAR	SMURF2	0.152157521
IRAK2	MYO1A	0.15238559
IRAK2	PTPRH	0.152387595
RPL22P2	SMURF2	0.152405273
CDCP1	SFRP4	0.152541441
ADH6	BMERB1	0.152622702
CHST11	SMURF2	0.152750431
IRAK2	PLAU	0.152797967
BMERB1	LINC01697	0.153000579
PLEK2	RPL22P2	0.153197117
DSE	TMOD1	0.1534633
EOMES	SMURF2	0.153473837

ETS1	TMEM37	0.153516585
KIAA1549L	SMURF2	0.153731721
MARCHF4	SMURF2	0.153969401
C11orf91	PTPRH	0.154002187
SMURF2	VIL1	0.154140366
BMP6	RAB3B	0.154154915
BMERB1	HRH1	0.154223413
RAB3B	ZNF185	0.154343224
ANKS4B	IRAK2	0.154428096
MARCHF4	RAB3B	0.15452971
CDCP1	TMC5	0.154579089
BMERB1	LINC00941	0.154754455
SMURF2	SOCS2	0.154805357
LTB	RAB3B	0.154840878
BMERB1	PLAU	0.154896462
CDCP1	MARCHF4	0.154938141
PTPRH	TMEM158	0.155004711
ETS1	LINC00941	0.155090165
CDCP1	HGD	0.155157291
BCAS1	IRAK2	0.15533267
P3H2	RAB3B	0.155385096
ETS1	MYO1A	0.155530411
ACACB	RAB3B	0.155640864
ARID5B	RAB3B	0.155666702
TMEM158	VIL1	0.155788947
ADH6	CDCP1	0.156239968
PTGES	RAB3B	0.156455547
HRH1	RPL22P2	0.156522354
BMERB1	HGD	0.15654832
CDCP1	RPL22P2	0.156598981
IRAK2	LINC00941	0.156961464
MARCHF4	TMEM158	0.156967409
APOH	BMERB1	0.157028925
BMERB1	PTPRH	0.157130382
HRH1	IRAK2	0.157155597
CDCP1	IRAK2	0.157243307
ANKS4B	BMERB1	0.157329604
C11orf91	RPL22P2	0.157700517
BMERB1	MYO1A	0.157775829
RAB3B	SFRP1	0.157926925
RIMBP3B	RIMBP3C	0.158050446
C11orf91	MARCHF4	0.158240143

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CDCP1	LINC00941	0.15836318
BMERB1	C11orf91	0.158378842
FOXO1	RAB3B	0.158594777
CDCP1	LAMC2	0.158648453
SLC23A1	SMURF2	0.158673007
LINC00941	SMURF2	0.158927448
IRAK2	RPL22P2	0.15906152
HRH1	MARCHF4	0.159180722
IRAK2	PLEK2	0.159181974
HECW2	SMURF2	0.159222937
HMGA2	RAB3B	0.15957527
EFR3B	RAB3B	0.159841632
HRH1	SMURF2	0.159843135
C11orf91	IRAK2	0.160218635
CDCP1	LINC01697	0.160512763
IRAK2	VIL1	0.160616928
HGD	SMURF2	0.160633917
C11orf91	CDCP1	0.160892163
BMERB1	RPL22P2	0.161065742
MYO1A	SMURF2	0.161401142
IRAK2	TMEM158	0.161480727
IRAK2	MARCHF4	0.161481601
CDCP1	MYO1A	0.161651736
BMERB1	IRAK2	0.161926326
RAB3B	XDH	0.162173385
CDCP1	EPHB2	0.162281662
BCAS1	BMERB1	0.162290035
INA	SMURF2	0.162692456
SH3KBP1	SMURF2	0.16283137
BMERB1	PLEK2	0.163071147
BMERB1	MARCHF4	0.163552764
BMERB1	TMEM158	0.163637805
MYH16	RAB3B	0.164886756
APOH	CDCP1	0.165335529
MUC16	RAB3B	0.165541347
CDCP1	PLEK2	0.165581578
CDCP1	VIL1	0.165830527
CDCP1	KIAA1549L	0.166155913
KCNN4	RAB3B	0.166376899
CDCP1	CHST11	0.166803002
BCAS1	CDCP1	0.166906967
BMERB1	VIL1	0.167371773

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CDCP1	TMEM158	0.169522536
CDCP1	PLAU	0.170177584
GPR176	RAB3B	0.170860332
BMERB1	CDCP1	0.173088735
RAB3B	SERPINB7	0.173802012
CPM	RAB3B	0.175816775
ITGB8	RAB3B	0.176641296
CD44	RAB3B	0.176707453
RAB3B	SPTB	0.189136824

The filtered nodes of darkgrey module (weight > 0.06)

fromNode	toNode	weight
ABCB1	NPY1R	0.062497218
ABCB1	TM4SF20	0.064090256
ADAMTS16	NPAS2	0.066080327
ADAMTS16	TM4SF20	0.062223667
ADAMTS9	KCNJ16	0.067341782
ADAMTS9	NPY1R	0.074904662
ADAMTS9	PPARGC1A	0.061869193
ADAMTS9	TM4SF20	0.081844673
ADGRV1	KCNJ16	0.064550971
ADGRV1	NPY1R	0.075987603
ADGRV1	SPTLC3	0.060828433
ADGRV1	TM4SF20	0.07005439
AGMO	CFI	0.065461339
AGMO	CHST9	0.065905599
AGMO	EPHA7	0.068606596
AGMO	KCNJ16	0.076749189
AGMO	MYORG	0.068113844
AGMO	NPY1R	0.095484522
AGMO	SPTLC3	0.066858921
AGMO	TM4SF20	0.083347257
ANO3	LOC101926943	0.061572219
ANO3	MAP7	0.069131648
ANO3	MYOCD	0.065875405
ANO3	MYORG	0.063157686
ANO3	OR51E2	0.067749595
ANO3	RASGEF1B	0.066900283
ANO3	SGK1	0.069383593
ANO3	SIK2	0.064542757



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ANO3	TM4SF20	0.084812974
BRINP1	DSCAM-AS1	0.061516783
BRINP1	KCNJ16	0.067308044
BRINP1	LOC107987015	0.061668476
BRINP1	MYORG	0.071758342
BRINP1	NPAS2	0.063914126
BRINP1	NPY1R	0.066513643
BRINP1	PALMD	0.060321884
BRINP1	PPARG	0.06861073
BRINP1	SPTLC3	0.061403508
BRINP1	TM4SF20	0.077838631
C4BPA	CFI	0.068406697
C4BPA	KCNJ16	0.081701432
C4BPA	MYORG	0.069329702
C4BPA	NPY1R	0.101139283
C4BPA	SPTLC3	0.064166803
C4BPA	TM4SF20	0.107641545
C4orf19	NPY1R	0.061224688
CADM1	CFI	0.075205516
CADM1	EPHA7	0.069817906
CADM1	KCNJ16	0.072405652
CADM1	MYORG	0.073916556
CADM1	NPAS2	0.065283897
CADM1	NPY1R	0.083249736
CADM1	SERPINE1	0.06335001
CADM1	SPTLC3	0.070898064
CADM1	TM4SF20	0.082892831
CAPN8	NPAS2	0.077194472
CAPN8	TM4SF20	0.063771672
CASP9	FURIN	0.0611201
CD24	CD24P4	0.101991661
CD24	MYORG	0.066778507
CD24	TM4SF20	0.06539906
CFI	CRB1	0.065836285
CFI	DSCAM-AS1	0.06477689
CFI	EPHA7	0.070703798
CFI	ERBB3	0.070783484
CFI	FOSL1	0.060684547
CFI	GDF7	0.062302347
CFI	KCNJ16	0.089452534
CFI	KCNK3	0.064305299
CFI	LDLRAD4	0.064618563

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CFI	LOC107987015	0.065174876
CFI	MYORG	0.094661962
CFI	NCALD	0.071934628
CFI	NPAS2	0.078490317
CFI	NPNT	0.062673028
CFI	NPY1R	0.101180326
CFI	OR51E2	0.066327426
CFI	OTOGL	0.062939738
CFI	PPARG	0.06250664
CFI	SERPINE1	0.061051155
CFI	SGK1	0.072384689
CFI	SPTLC3	0.078918915
CFI	TM4SF20	0.117827366
CFI	TRIM40	0.064099535
CFI	TSPAN13	0.063472317
CFI	UGT1A8	0.064437885
CGN	KCNJ16	0.06615508
CGN	MYORG	0.08201034
CGN	NPY1R	0.073272996
CGN	TM4SF20	0.068563752
CHST9	DNAJC22	0.070980079
CHST9	DSCAM-AS1	0.060790109
CHST9	EPHA7	0.074668434
CHST9	FLJ32255	0.06020999
CHST9	GRIK2	0.070288461
CHST9	HMGB3	0.067876329
CHST9	KCNJ16	0.085485477
CHST9	MYORG	0.072811807
CHST9	NCALD	0.06608753
CHST9	NPY1R	0.085533867
CHST9	OTOGL	0.064177418
CHST9	PPARGC1A	0.062808204
CHST9	SGK1	0.063348425
CHST9	SPTLC3	0.06840033
CHST9	TM4SF20	0.088883897
CHST9	TM4SF4	0.064208228
CHST9	TRIM40	0.061722253
CLDN2	CRB1	0.062623522
CNTNAP2	DSCAM-AS1	0.062798777
CNTNAP2	SERPINE1	0.070695501
CNTNAP2	SGK1	0.063992363
COL4A1	COL4A2	0.067180636

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COL4A4	TM4SF20	0.061425226
CPS1	EPHA7	0.06951396
CPS1	GABRB3	0.069361439
CPS1	KCNJ16	0.069649617
CPS1	MAP7	0.061082951
CPS1	NPY1R	0.074944431
CPS1	PDE10A	0.062785065
CPS1	PDE3A	0.069364652
CPS1	PPARGC1A	0.079856655
CPS1	SGK1	0.06895702
CPS1	SPTLC3	0.065772653
CPS1	TM4SF20	0.077660824
CRB1	DSCAM-AS1	0.064034117
CRB1	GDF7	0.060521124
CRB1	GPR37	0.060560577
CRB1	KCNK3	0.068783258
CRB1	MYORG	0.06869265
CRB1	NPAS2	0.06982108
CRB1	P4HA3	0.073773013
CRB1	SERPINE1	0.075213792
CRB1	SGK1	0.079422205
CRB1	SIK1	0.061450837
CRB1	SPTLC3	0.063284957
CRB1	TM4SF20	0.081722566
CTH	LRP11	0.06268163
CTH	MAP7	0.067498241
CTH	PDE10A	0.066484022
DNAJC22	EPHA7	0.060289135
DNAJC22	KCNJ16	0.075105459
DNAJC22	MYORG	0.074347504
DNAJC22	NPY1R	0.085221914
DNAJC22	TM4SF20	0.096568179
DNER	FURIN	0.060709502
DSCAM-AS1	EPHA7	0.069406687
DSCAM-AS1	FLJ32255	0.065014224
DSCAM-AS1	KCNJ16	0.079861652
DSCAM-AS1	MYORG	0.072413712
DSCAM-AS1	NPAS2	0.074296958
DSCAM-AS1	NPY1R	0.078004133
DSCAM-AS1	PPARG	0.064437789
DSCAM-AS1	SERPINE1	0.069549762
DSCAM-AS1	SGK1	0.072734301

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DSCAM-AS1	SPTLC3	0.067801986
DSCAM-AS1	TM4SF20	0.092724487
DTX4	MYORG	0.09488607
DTX4	NCALD	0.071983648
DTX4	NPY1R	0.073213038
DTX4	TM4SF20	0.076235869
DUSP16	MAP7	0.087472007
DUSP16	PDE10A	0.064296947
DUSP16	PPARGC1A	0.063316445
DUSP16	SGK1	0.066974996
DUSP16	TM4SF20	0.067563092
DUSP16	VASH2	0.067170353
EPCAM	NPNT	0.065170818
EPCAM	UGT1A8	0.08863221
EPHA7	FLJ32255	0.061250905
EPHA7	FOSL1	0.063129084
EPHA7	KCNJ16	0.083936912
EPHA7	LOC107987015	0.06895397
EPHA7	MAFF	0.063010608
EPHA7	MAP7	0.061126893
EPHA7	MOK	0.061369506
EPHA7	MYORG	0.080525861
EPHA7	NCALD	0.070490991
EPHA7	NPAS2	0.072607177
EPHA7	NPY1R	0.090321442
EPHA7	OTOGL	0.069955709
EPHA7	PALMD	0.060271571
EPHA7	PPARGC1A	0.068238094
EPHA7	SGK1	0.075776505
EPHA7	SPTLC3	0.07893258
EPHA7	SPTSSA	0.066430846
EPHA7	TM4SF20	0.094950503
EPHA7	TRIM40	0.062797847
EPHA7	VASH2	0.061881051
ERBB3	KCNJ16	0.069561895
ERBB3	MYORG	0.076466476
ERBB3	NPY1R	0.092299876
ERBB3	SPTLC3	0.071245156
ERBB3	TM4SF20	0.10483361
ETNPPL	NPY1R	0.06654239
ETNPPL	TM4SF20	0.077300183
ETS2	KCNJ16	0.065850163

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ETS2	LINC02732	0.063238344
ETS2	MAP7	0.072678579
ETS2	MYORG	0.075848855
ETS2	NPY1R	0.065945306
ETS2	OR51E2	0.068412525
ETS2	PHLPP1	0.062474161
ETS2	RASGEF1B	0.067668136
ETS2	SGK1	0.078524901
ETS2	TM4SF20	0.093972061
FLJ32255	KCNJ16	0.07086324
FLJ32255	LOXL2	0.061864182
FLJ32255	MOK	0.060863375
FLJ32255	MYORG	0.063068687
FLJ32255	NPAS2	0.073590962
FLJ32255	NPY1R	0.067626773
FLJ32255	PPARG	0.071901455
FLJ32255	SERPINE1	0.062653359
FLJ32255	SPTLC3	0.061437541
FLJ32255	TM4SF20	0.081104888
FOSL1	KCNJ16	0.077790858
FOSL1	MYORG	0.075665587
FOSL1	NPAS2	0.080907086
FOSL1	NPY1R	0.08708063
FOSL1	SHB	0.062269855
FOSL1	SPTLC3	0.067635208
FOSL1	TM4SF20	0.097703435
FST	RASGEF1B	0.066261434
GABRB3	LRP11	0.066350395
GABRB3	PDE10A	0.070564718
GABRB3	PDE3A	0.078015856
GABRB3	PPARGC1A	0.067911844
GDF7	MYORG	0.07868712
GDF7	NPAS2	0.063882691
GDF7	NPY1R	0.060468008
GDF7	OR51E2	0.072495881
GDF7	RASGEF1B	0.069938267
GDF7	SGK1	0.0729021
GDF7	TM4SF20	0.097345636
GPR3	NPAS2	0.068364401
GPR3	TM4SF20	0.067054244
GRIK2	NPY1R	0.063843434
GRIK2	TM4SF20	0.063506961

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HEPH	NPNT	0.062740783
HMGB3	KCNJ16	0.063634144
HMGB3	NPY1R	0.063989909
HMGB3	TM4SF20	0.068633378
HOXA5	MYORG	0.07324971
HOXA5	TM4SF20	0.068677587
INPP1	NPAS2	0.062227867
INPP1	TM4SF20	0.07161427
KCNJ15	SGK1	0.06096294
KCNJ15	TM4SF20	0.06162836
KCNJ16	LOC107987015	0.072747328
KCNJ16	LOXL2	0.067496044
KCNJ16	MAFF	0.078729754
KCNJ16	MAP7	0.066551806
KCNJ16	MOK	0.064000396
KCNJ16	MYOCD	0.065162166
KCNJ16	MYORG	0.08126494
KCNJ16	NCALD	0.085798057
KCNJ16	NPAS2	0.070776232
KCNJ16	NPY1R	0.104430011
KCNJ16	OR51E2	0.08799466
KCNJ16	OTOGL	0.082269966
KCNJ16	PALMD	0.070970366
KCNJ16	PPARG	0.060167411
KCNJ16	PPARGC1A	0.085650293
KCNJ16	PRG4	0.062740369
KCNJ16	RASGEF1B	0.064387716
KCNJ16	SGK1	0.087549209
KCNJ16	SHB	0.074923
KCNJ16	SPTLC3	0.095891707
KCNJ16	TM4SF20	0.116720375
KCNJ16	TM4SF4	0.080317907
KCNJ16	TRIM40	0.088915981
KCNJ16	TSPAN13	0.080811026
KCNK3	MYORG	0.071516451
KCNK3	NPAS2	0.060100284
KCNK3	SERPINE1	0.079920016
KCNK3	SGK1	0.068182425
KCNK3	TM4SF20	0.074309609
LDLRAD4	MYORG	0.068596848
LDLRAD4	NPY1R	0.072245194
LDLRAD4	SPTLC3	0.069353637

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LDLRAD4	TM4SF20	0.079226074
LINC02732	MYORG	0.064188829
LINC02732	TM4SF20	0.067247128
LOC105378114	TM4SF20	0.065167553
LOC107986822	SGK1	0.061609222
LOC107986822	TM4SF20	0.079703018
LOC107987015	MYORG	0.087129349
LOC107987015	NPAS2	0.072758679
LOC107987015	NPY1R	0.074918855
LOC107987015	SERPINE1	0.066599072
LOC107987015	SGK1	0.069744497
LOC107987015	SPTLC3	0.068467376
LOC107987015	TM4SF20	0.098901051
LOXL2	MYORG	0.061858941
LOXL2	NPAS2	0.071984911
LOXL2	NPY1R	0.068716909
LOXL2	PPARG	0.063962063
LOXL2	SHB	0.071407804
LOXL2	TM4SF20	0.081885708
LRP11	MAP7	0.078433022
LRP11	PDE10A	0.068550437
LRP11	PPARGC1A	0.063566731
LRP11	SH3BP5	0.060645754
LRP11	VASH2	0.06076213
MAFF	MYORG	0.076072314
MAFF	NPAS2	0.07449805
MAFF	NPY1R	0.08674739
MAFF	SHB	0.067413876
MAFF	SPTLC3	0.062189069
MAFF	TM4SF20	0.09348823
MAP7	MYOCD	0.076740949
MAP7	MYORG	0.062471484
MAP7	NPY1R	0.069490674
MAP7	OR51E2	0.063276432
MAP7	PDE10A	0.096145918
MAP7	PHLPP1	0.067913001
MAP7	PPARGC1A	0.07483028
MAP7	SGK1	0.079116881
MAP7	SH3BP5	0.109584331
MAP7	SIK1	0.078840694
MAP7	SIK1B	0.068259019
MAP7	SIK2	0.104472264

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MAP7	SPTLC3	0.062096496
MAP7	SPTSSA	0.064246543
MAP7	TM4SF20	0.082909019
MAP7	TRNP1	0.061328509
MAP7	VASH2	0.080409886
MOK	MYORG	0.065409654
MOK	NPAS2	0.079812273
MOK	NPY1R	0.066023165
MOK	SERPINE1	0.063247283
MOK	TM4SF20	0.079014003
MROCKI	NPY1R	0.062925314
MROCKI	TM4SF20	0.070497852
MUC13	RAET1E	0.06190382
MYOCD	NPY1R	0.068265754
MYOCD	OR51E2	0.111846372
MYOCD	PPARGC1A	0.076153331
MYOCD	RASGEF1B	0.062229867
MYOCD	SGK1	0.070750821
MYOCD	TM4SF20	0.106590006
MYORG	NCALD	0.112787068
MYORG	NPAS2	0.072261621
MYORG	NPY1R	0.086033948
MYORG	OR51E2	0.084072909
MYORG	OTOGL	0.064692175
MYORG	PPARGC1A	0.062496114
MYORG	PRG4	0.068039774
MYORG	RASGEF1B	0.075860902
MYORG	SEC16B	0.064736013
MYORG	SERPINE1	0.066576842
MYORG	SGK1	0.08664826
MYORG	SHB	0.062881214
MYORG	SPTLC3	0.094127883
MYORG	TM4SF20	0.103570509
MYORG	TM4SF4	0.082796535
MYORG	TRIM40	0.077706476
MYORG	TSPAN13	0.070111507
NCALD	NPAS2	0.069356738
NCALD	NPY1R	0.098124572
NCALD	SPTLC3	0.073256521
NCALD	TM4SF20	0.11209724
NPAS2	NPY1R	0.069421281
NPAS2	OR51E2	0.072354455

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NPAS2	PRAG1	0.066504271
NPAS2	RASGEF1B	0.070968042
NPAS2	SERPINE1	0.073329833
NPAS2	SGK1	0.073545923
NPAS2	SHB	0.07332324
NPAS2	SPTLC3	0.080935171
NPAS2	TM4SF20	0.077636456
NPAS2	TRIM40	0.061338978
NPAS2	TRNP1	0.062734816
NPAS2	TSHZ3	0.061279039
NPNT	NPY1R	0.06707676
NPNT	PCSK5	0.061115646
NPNT	TM4SF20	0.061485806
NPNT	UGT1A8	0.062494238
NPY1R	OR51E2	0.095465626
NPY1R	OTOGL	0.10313723
NPY1R	PALMD	0.075545072
NPY1R	PCSK5	0.075861787
NPY1R	PPARGC1A	0.093232644
NPY1R	PRG4	0.063874413
NPY1R	RASGEF1B	0.06482692
NPY1R	SEC16B	0.068913309
NPY1R	SESN3	0.065583638
NPY1R	SGK1	0.095213945
NPY1R	SHB	0.077354921
NPY1R	SPTLC3	0.107831804
NPY1R	SPTSSA	0.062888625
NPY1R	TM4SF20	0.129097589
NPY1R	TM4SF4	0.079510656
NPY1R	TRIM40	0.103171678
NPY1R	TSPAN13	0.102220842
NPY1R	UGT1A8	0.06876419
OR51E2	PPARGC1A	0.061173464
OR51E2	RASGEF1B	0.071367405
OR51E2	SGK1	0.07229476
OR51E2	SIK1	0.078099209
OR51E2	SIK1B	0.07773581
OR51E2	SIK2	0.060262279
OR51E2	SLC45A4	0.078978258
OR51E2	SPTLC3	0.066967154
OR51E2	TM4SF20	0.139682687
OTOGL	SGK1	0.060987645

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OTOGL	SPTLC3	0.071710975
OTOGL	TM4SF20	0.094130518
PALMD	PPARG	0.064740647
PALMD	TM4SF20	0.071859631
PCSK5	TM4SF20	0.060704866
PDE10A	PPARGC1A	0.076166241
PDE10A	SGK1	0.075873403
PDE10A	SH3BP5	0.063512626
PDE10A	SIK1	0.06634949
PDE10A	SIK2	0.06533096
PDE10A	VASH2	0.077985337
PHLPP1	SIK2	0.061862454
PHLPP1	VASH2	0.067613434
PPARG	SERPINE1	0.069472228
PPARGC1A	SGK1	0.070910091
PPARGC1A	SH3BP5	0.064631856
PPARGC1A	SIK1	0.060071605
PPARGC1A	SIK2	0.071981201
PPARGC1A	SPTLC3	0.067514768
PPARGC1A	TM4SF20	0.098844954
PPARGC1A	VASH2	0.070128497
PRG4	TM4SF20	0.090203697
RASGEF1B	SGK1	0.074004119
RASGEF1B	SIK1	0.068150488
RASGEF1B	SIK1B	0.066131333
RASGEF1B	SIK2	0.062161725
RASGEF1B	TM4SF20	0.099745301
SEC16B	TM4SF20	0.079459164
SERPINE1	SGK1	0.061118222
SERPINE1	SPTLC3	0.060811144
SERPINE1	TM4SF20	0.072944461
SGK1	SH3BP5	0.064984218
SGK1	SIK1	0.078345361
SGK1	SIK1B	0.074489287
SGK1	SIK2	0.075513677
SGK1	SPTLC3	0.077573748
SGK1	SPTSSA	0.068700552
SGK1	TM4SF20	0.117629275
SGK1	TRIM40	0.067916961
SGK1	TRNP1	0.06095571
SGK1	VASH2	0.07172202
SH3BP5	SIK2	0.070538961

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SH3BP5	TM4SF20	0.063993165
SH3BP5	VASH2	0.066488856
SHB	SPTLC3	0.061897979
SHB	TM4SF20	0.082187063
SIK1	SIK1B	0.157059173
SIK1	TM4SF20	0.089160461
SIK1B	SLC45A4	0.061896306
SIK1B	TM4SF20	0.09429377
SIK2	TM4SF20	0.070295108
SIK2	VASH2	0.078869525
SLC25A45	TM4SF20	0.067330531
SLC45A4	TM4SF20	0.070058746
SPTLC3	TM4SF20	0.119458954
SPTLC3	TRIM40	0.066774418
SPTSSA	TM4SF20	0.066485125
TM4SF20	TM4SF4	0.096527992
TM4SF20	TNFAIP2	0.066125005
TM4SF20	TRIM40	0.123369333
TM4SF20	TRNP1	0.073904471
TM4SF20	TSHZ3	0.076922246
TM4SF20	TSPAN13	0.112511951
TM4SF20	UGT1A8	0.061616632
TM4SF20	VASH2	0.063290656

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