

Sample gene sequences were annotated using the KEGG database on metabolic pathways based on their metabolic function prediction using PICRUST2.

KEGGLevel2	description	A1
Poorly Characterized	Poorly Characterized	11012812.82
Replication and Repair	Replication and Repair	14889870.48
Glycan Biosynthesis and Metabolism	Glycan Biosynthesis and Metabolism	3507318.28
Digestive System	Digestive System	79018.26
Nervous System	Nervous System	85528
Metabolism	Metabolism	3951396.28
Cardiovascular Diseases	Cardiovascular Diseases	78330
Metabolism of Other Amino Acids	Metabolism of Other Amino Acids	3557521.44
Cell Growth and Death	Cell Growth and Death	1115302.76
Environmental Adaptation	Environmental Adaptation	321151.36
Carbohydrate Metabolism	Carbohydrate Metabolism	16097980.18
Immune System Diseases	Immune System Diseases	114115.24
Folding, Sorting and Degradation	Folding, Sorting and Degradation	5032069.88
Circulatory System	Circulatory System	92341.50
Lipid Metabolism	Lipid Metabolism	6833540.65
Infectious Diseases	Infectious Diseases	1092862.97
Metabolism of Cofactors and Vitamins	Metabolism of Cofactors and Vitamins	7079792.93
Nucleotide Metabolism	Nucleotide Metabolism	6464959.08
Amino Acid Metabolism	Amino Acid Metabolism	17737688.56
Translation	Translation	9305689.06
Energy Metabolism	Energy Metabolism	10223582.61
Sensory System	Sensory System	0
Transport and Catabolism	Transport and Catabolism	606179.88
Signaling Molecules and Interaction	Signaling Molecules and Interaction	334636.92
Enzyme Families	Enzyme Families	3999026.81
Excretory System	Excretory System	88077.77
Xenobiotics Biodegradation and Metabolism	Xenobiotics Biodegradation and Metabolism	5723608.20
Cell Motility	Cell Motility	6271135.44
Endocrine System	Endocrine System	804409.99
Membrane Transport	Membrane Transport	21503455.27
Genetic Information Processing	Genetic Information Processing	5330113.72
Biosynthesis of Other Secondary Metabolites	Biosynthesis of Other Secondary Metabolites	1119350.92
Transcription	Transcription	4708755.33

Cancers  
Signal Transduction  
Metabolism of Terpenoids and Polyketides  
Cellular Processes and Signaling  
Neurodegenerative Diseases  
Metabolic Diseases  
Immune System

Cancers	425276.62
Signal Transduction	5092520.86
Metabolism of Terpenoids and Polyketides	3067213.39
Cellular Processes and Signaling	8858268.35
Neurodegenerative Diseases	997167.11
Metabolic Diseases	115097.77
Immune System	109495.80

A10	A11	A12	A13	A14	A15	A16	A17
8486813.77	6360419.63	8126190.39	9677337.77	5784477.08	5463807.41	6113958.67	10401555.83
10783405.26	11310671.06	10415429.78	12327980.97	7550188	7290340.07	8459592.47	13218378.78
2682831.16	1982035.70	2575102.52	3083786.08	1860856.04	1756080.98	1932105.47	3280737.84
61145.82	54373.06	59203.95	68414.81	42568.72	40728.37	45869.35	73008.62
64888.36	54876.96	61297.09	75847.46	45653.87	43766.76	47672.93	82884.87
3047897.01	2298892.81	2980975.37	3486121.11	2121225.85	1937287.69	2168794.88	3692672.83
66967.08	7981	66975.66	82934.68	50022.66	35744.34	36629.66	80006.48
2760619.71	1928552.63	2711789.18	3114663.80	1879691.72	1712780.89	1923107.31	3324675.18
855983.10	620546.69	843309.35	1000593	603111.39	540426.74	600757.16	1033064.61
260198.86	172211.34	251549.88	291710.77	175599.07	160677.90	179030.73	313228.21
11173718.59	14922660.60	10949616.70	12759925.46	7774431.61	7726448.68	9369440.39	13597691.57
78123.55	103688.46	75900.64	87404.38	53190.71	55566.17	65863.37	95707.58
3869428.59	2782512.17	3719816.12	4415706.30	2683181.27	2482062.08	2765354.43	4740230.32
80955.54	8786	85489.49	89460.01	57447.49	38907.01	41860.99	92720.68
5365416.07	3463396.21	5228611.47	6051277.93	3617962.55	3295352.19	3673675.48	6488072.06
802644.93	712580.05	773928.05	941719.65	574204.29	525778.61	600767.20	989637.11
5578008.15	3316234.40	5371057.43	6392025.00	3866575.02	3515262.27	3842445.21	6814208.42
4644460.92	5044789.74	4485627.95	5317914.91	3251009.31	3184749.59	3693895.78	5682525.27
13882820.06	8585125.06	13521842.75	15741964.20	9497790.19	8571633.14	9493436.00	16816375.43
6682019.77	7186433.37	6418176.24	7651301.90	4680253.03	4579814.46	5310792.58	8214166.14
7911093.13	5760108.38	7670251.80	9045952.81	5456978.57	5024596.40	5624612.12	9604530.21
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507696.03	201065.17	485128.76	571558.37	338836.82	300671.73	319645.75	611513.32
239347.94	262690.65	242849.37	263487.83	165852.51	153775.91	181561.31	287432.28
3028636.83	2439937.78	2942312.91	3445182.11	2109297.98	1925588.97	2186574.63	3689497.71
76860.61	9031.56	74266.68	86047.11	52532.91	43655.32	44143.76	90680.13
4749400.72	1791964.49	4563356.94	5341187.47	3130076.08	2832894.46	3000207.76	5768343.03
5604074.72	824401.28	5622783.99	6257950.87	3868965.71	2931516.04	3069140.34	6565565.98
671178.15	221485.47	644961.91	756204.35	451856.16	391693.86	412539.79	808009.48
15149792.39	20419380.13	15057443.23	17143671.82	10591816.16	10423376.87	12668799.36	17940493.64
4001057.33	3415520.30	3822930.05	4593657.78	2756170.22	2655150.33	2976039.68	4926404.58
873691.83	622404.37	844935.29	993634.36	588375.52	548103.66	612222.37	1077606.90
3393044.91	3853443.62	3296870.13	3857834.47	2340151.19	2287338.83	2699705.68	4130310.17

372953.48	44744.15	361800.68	443554.16	264826	209792.10	213160.16	448121.85
4157162.98	2186175.70	4074055.22	4688334.21	2871816.67	2453816.60	2711579.53	4949937.32
2338898.97	1834585.31	2281852.91	2655043.06	1607792.30	1488824.35	1681247.66	2835232.20
7289099.01	3148778.77	6919264.10	8298381.01	4919493.87	4468096.36	4754253.94	8918671.64
844369.80	240476.04	832410.62	978552.93	593836.61	472294.49	501453.02	1006657.24
78619.16	103867.19	77779.30	90777.50	58235.67	55780.65	65891.06	95904.09
100196.49	11987.46	92422.62	113409.07	65187.46	60977.85	59093.54	122871.30

A18	A19	A2	A20	A3	A4	A5	A6
6487325.21	6569577.44	5962578.58	4781602.22	13525352.81	6111737.53	7568937.46	11198237.96
8222193.48	8288423.91	7183207.72	6753768.32	17148167.72	7394878.62	13323664.04	16539005.28
2065883.84	2081395.43	2374122.10	1406826.99	4266905.68	2434244.20	2058699.44	3552061.82
45692.53	46280.11	30359.84	35988.38	96099.21	42563.10	69085.42	84997.75
47446.53	49448.96	48955.36	36997.39	103962.61	50079.50	113303.84	92858.86
2290123.65	2295212.96	2414749.96	1562927.96	4803096.25	2545373.40	2383410.48	4041984.01
50608.34	48456.56	14402.32	22316.34	102384.34	38156.50	9811.02	62045.02
2048866.23	2080134.21	1771882.38	1504863.33	4365581.02	1815022.25	2335668.27	3531669.42
638303.63	644354.83	399553.64	440143.05	1357418.13	520799.67	726833.72	1124536.15
195407.22	196270.90	224678.06	118764.81	401968.40	169009.90	159321.34	324535.21
8308716.52	8398278.56	9014613.38	7443720.12	17681204.48	8058675.01	14194771.40	19263812.42
58928.89	60681.98	52126.24	42023.42	126663.28	50843.70	71936.94	132900.17
2968891.89	2993583.35	2483912.46	2246247.71	6148250.86	2627656.43	4079410.80	5033648.13
57060.51	55171.87	16857.48	25277.50	121717.02	39663.50	12002.02	69750.02
4003587.50	4065601.37	3023317	2824894.56	8479451.85	3427505.24	4158466.65	6655237.08
617719.86	610533.92	597610.58	522832.05	1260082.71	603937.67	860487.23	1155152.03
4249394.10	4297623.26	3583404.44	3393039.59	8866112.66	3797373.87	6308183.98	6776456.82
3529024.72	3570600.52	3222054.98	2999250.58	7390037.38	3236318.59	5937392.13	7274991.36
10420865.16	10556765.38	8519453.70	7890236.92	21962173.13	8943534.74	13089631.13	16971623.89
5130826.41	5180055.52	4235970.26	4260071.78	10648668.50	4478743.28	8504614.91	10378799.52
5986165.50	6041551.29	4599700.32	4550249.30	12521267.28	5402721.24	7702489.50	10302729.32
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381175.72	387040.29	214396.74	220923.33	791708.85	311857.59	303716.20	536769.38
168350.42	170526.70	136368.44	133784.21	369199.78	142954.67	241965.47	369784.18
2279200.38	2284099.25	2273842.50	1699269.23	4750414.06	2149305.50	2951295.57	4123944.38
58563.72	59578.24	51151.68	26919.04	120746.81	50039.24	55986.03	67380.46
3601069.49	3681249.52	2223667.94	1996464.08	7545042.09	3062307.03	1959921.16	4984368.06
4065409.72	3992902.67	3813375.18	1880227.13	8464595.33	3789151.12	1179361.49	4979738.36
510661.66	516213.62	302811.52	248773.06	1043802.20	392068.33	363696.51	675101.34
11159294.82	11210276.03	15941915.62	8920235.86	23652874.55	11237273.35	15890641.03	26073720.61
3087914.18	3109994.15	2569731.76	2168581.09	6362710.29	3010182.52	3441666.80	5590820.48
645100.96	657488.21	717324.72	462789.42	1370403.21	590269.93	709101.74	1125994.20
2552257.26	2567652.95	2952156.52	2029212.31	5364288.84	2625320.61	3500128.49	5389312.28

285695.47	281337.31	165821.96	158690.22	577734.95	234611.91	175212.26	339218.16
3101669.58	3084101.42	2831315.94	1984211.56	6411395.42	2938839.94	2594533.48	4818568.18
1760027.29	1783607.92	1344184.50	1259031.45	3706562.17	1453062.86	2140017.15	3131207.53
5602170.52	5669714.52	4893787.48	3784114.62	11603539.59	5399198.02	5224557.98	8024098.74
633898.37	624809.15	235110.08	344912.28	1304168.25	498987.32	343751.67	846162.50
58024.17	58544.55	68393.02	56564.31	124766.48	66667.40	153494.62	137623.24
77907.50	79591.66	72981.14	35551.74	158757.52	66295.14	16110.17	87877.69

A7	A8	A9	B1	B10	B11	B12	B13
13342449.58	13681574.23	10301957.04	9006883.83	7679798.27	8712050.02	10076371.77	6662517.91
16898287.87	17307615.92	13137678.92	16234244.24	9761471.87	10925782.12	12688239.83	8451746.78
4208744.95	4310333.05	3255339.05	2807637.92	2470662.29	2740746.78	3190691.27	2115158.42
96400.25	95956.36	74353.92	77856.41	53861.68	60471.28	70513.56	47823.59
103001.42	105033.08	83964.91	82433.61	57957.29	63878.06	78530.61	49007.26
4766210.50	4855242.75	3817792.16	3266561.07	2757466.59	3002488.96	3517049.20	2367667.66
102855.34	103514.68	93875.48	9802.32	64532.34	59521	75138.53	49092.32
4372138.46	4445032.12	3407449.42	2734826.88	2443611.29	2745699.52	3181414.94	2133924.24
1367538.71	1370488.58	1104349.40	884724.51	775751.13	828152.88	1004753.37	649183.24
401662.03	413729.34	315151.84	243073.41	233802.67	258201.20	298445.37	201686.37
17600084.50	17912116.92	13969735.65	21327484.89	10029341.37	11022344.12	12911925.69	8622748.04
126014.52	127223.44	94026.35	148351.89	68198.25	81246.14	92277.86	61641.01
6062542.42	6217142.13	4682838.52	3979450.24	3513025.83	3957873.84	4577668.26	3038227.70
125742.51	125891.51	103911.48	11397.99	70692.50	71272.50	81088.52	61738.99
8457155	8641961.74	6595599.98	4889115.39	4763669.62	5387357.26	6207225.06	4156103.12
1235676.45	1272829.30	1012503.52	1007556.40	753725.40	793207.90	936188.15	622207.28
8769823.89	8937239.42	6840701.98	4750895.85	5055646.83	5643828.30	6612543.68	4346753.89
7300647.79	7447306.10	5685242.92	7247013.06	4189334.46	4688041.28	5489090.34	3618059.98
21887237.76	22303253.22	17093472.41	12213589.12	12394443.90	13936051.22	16177833.39	10778449.95
10466663.35	10748035.46	8106631.54	10318993.90	6065508.25	6834956.84	7948204.07	5239956.50
12434712.33	12646651.36	9772163.47	8195716.54	7133517.04	7908310.72	9272331.46	6138652.46
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792729.59	813864.17	618937.04	284368.05	451869.36	514669.12	587164.61	391886.76
375610.78	382919.57	297458.40	377858.35	204876.26	225537.40	255874.63	182847.36
4697023.46	4846209.52	3713579.58	3482178.74	2747520.60	3023763.86	3492284.04	2356371.55
122221.79	124246.97	92886.09	14847.22	67389.76	79549.28	90114.23	60009.42
7534782.53	7695055.27	5812389.98	2467369.87	4205131.37	4901407.02	5630184.87	3698223.48
8558500.72	8670486.89	7050599.11	1084630.43	4993625.88	5124921.86	6003876.92	4274892.94
1043480.73	1083342.15	815073.95	318405.97	600232.12	691644.12	783473.65	519049.98
23789097.62	23924772.50	19197991.66	29177378.39	13477540.30	14503831.30	17180624.07	11663217.09
6268601.97	6434027.40	4878561.16	4855107.15	3649207.38	4109128.92	4772197.25	3138442.27
1366686.89	1410314.01	1081483.27	882556.45	784396.63	871994.18	1014772.11	671119.53
5294917.57	5440318.35	4152036.98	5488981.99	3061416.95	3396296.12	3936904.25	2653774.41

575987.56	583041.53	487842.15	58291.22	348603.52	355711.56	432852.83	281536.13
6411956.66	6538548.61	5140759.55	3069896.46	3743998.64	4022619.46	4655873.68	3214863.18
3702581.37	3759057.02	2885560.04	2616873.19	2084314.99	2347034.86	2727891.78	1812978.84
11419388.36	11705793.86	8760344.12	4395662.96	6614687.69	7511010.04	8683318.74	5744174.03
1309258.62	1325563.96	1082405.91	329188.23	772395.06	803752.62	948906.76	643823.77
123613.75	125143.17	99943.93	152368.60	71522.29	75192.28	90293.90	60295.58
154998.32	159468.60	117413.43	14764.79	90396.25	103590.42	121026.93	78931.84



B14	B15	B16	B17	B18	B19	B2	B20
7895260.83	3359041.72	6147646.98	1966458.32	6121611.53	5943871.67	11516153.28	6161190.07
10002559.03	6423367.73	7797842.29	2730960.11	7755325.49	7491592.73	15154041.84	7848230.93
2508523.87	1557124.06	1946479.76	581652.16	1944049.42	1900842.61	3695732.06	1977735.58
56266.51	50081	43972.17	11672.78	43757.56	42769.78	90725.50	44071.27
59791.28	51152.80	45842.97	18426.48	46062.74	45421.85	85425.51	45446.06
2818836.08	1482362.38	2183640.29	814954.50	2163757.09	2112094.41	4364999.63	2214722.85
61962.34	2533	47705.66	10992	46576.34	46853.68	91474.34	50782.02
2542687.40	1066086.35	1974059.92	637892.65	1953956.31	1877377.15	3939199.04	1965789.21
790500.19	361904.19	612342.13	190647.57	607676.07	590724.76	1204067.14	613943.53
238278.69	106249.92	185226.16	63796.56	183655.73	180449.83	364477.72	188249.31
10297022.34	5804739.16	7966005.57	3404331.36	7905923.35	7649929.55	16120834.66	8003130.54
72582.45	52321.60	56731.33	20879.48	56634.99	53101.45	113809.78	55150.04
3593029.65	1799692.29	2802406.81	894408.77	2787325.73	2698842.83	5334453.83	2823518.52
73261.51	2979	56973.99	11900	54906.51	51794.01	136220	58385.52
4944669.46	1773358.41	3845147.05	1182124.43	3805728.33	3652823.75	7529098.75	3826270.40
748465.66	395282.86	579193.06	239410.20	573627.56	569698.78	1084052.59	599911.09
5169114.94	2646468.82	4021636.77	1363584.18	4001646.65	3886295.67	7673756.84	4044719.31
4297067.72	3066286.62	3346139.21	1236894.84	3333086.90	3228934.81	6523526.44	3363969.10
12802958.18	5153339.87	9953449.47	3396541.35	9875458.74	9500721.61	19577152.35	9956978.47
6199357.42	4166533.43	4839700.84	1731978.05	4817752.75	4661082.48	9237685.86	4869605.08
7304984.07	3407813.55	5687347.77	1920220.83	5646233.25	5468240.50	11132236.42	5715890.55
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467367.61	164862.57	363835.83	97419.13	360560.17	350480.54	686211.24	365226.80
216672.31	176966.45	167996.52	85410.91	164379.55	156520.56	372734.14	167057.04
2794119.64	1478038.07	2168605.95	815347.41	2145793.31	2089382.65	4221638.69	2197119.75
70272.56	9092.66	55011	14897.54	54763.49	52257.02	108616.29	54888.48
4380038.69	906333.07	3420947.14	945036.69	3397672.09	3268056.83	6423898.94	3382768.56
5061919.23	881912.14	3930023.41	1236021.54	3845455.18	3741317.44	8660164.88	4033227.01
614959.95	180107.22	479096.47	121168.88	473994.09	457356.34	898992.95	484021.31
13890593.10	7099305.13	10701497.42	4496313.23	10641986.27	10407536.39	23086784.52	10900996.30
3719517.95	2085861.03	2898053.03	967243.15	2888270.21	2804721.11	5444284.61	2926590.81
802535.83	451021.62	620068.40	257631.34	614280.01	602471.19	1187300.73	621565.75
3140521.12	1767532.16	2432169.72	951540.78	2416383.56	2342866.11	4799807.01	2453622.33

344218.74	72903.49	267261.81	69500.59	264029.70	263879.31	505005.57	278621.16
3810069.83	1067187.59	2960165.94	897897.23	2921395.83	2860976.28	6051229.70	3027258.53
2157563.46	949449.88	1680999.77	555489.38	1667415.80	1600743.25	3329614.04	1677247.21
6794638.11	2468768.68	5295513.35	1732163.86	5282962.71	5145281.78	9755240.82	5316612.05
778095.86	124808.53	604831.45	150655.99	594480.83	582216.12	1199764.41	622498.03
72389.73	77861.77	55837.50	22845.59	55563.24	53794.89	117724.38	56564.23
93207.01	65582	73295.66	22120.48	73395.54	72455.02	130308.57	73611.45

B3	B4	B5	B6	B7	B8	B9	C1
13926417.64	13196670.50	5243120.95	13264009.54	13666850.08	13983100	3608835.14	4800855.82
17760431.07	16649484.47	6617396.42	16776585.05	17184277.33	17751462.78	5141197.01	8266761.79
4408563.95	4156900.67	1679328.29	4178883.80	4358132.88	4443073.08	1123155.99	1944793.96
98641.04	92948.56	38660.83	91892.32	95715.72	95997.36	24809.06	42502.34
104673.90	103197.79	39224.66	99576.29	101834.22	105487.28	28076.81	49217.74
5001059.15	4664736.98	1851258.42	4679944.58	4824568.50	4971169.16	1275751.91	1684434.92
111703.02	97568.49	37492	102442.32	106258	114778.82	20184.98	17003.07
4549868.24	4260195.76	1634291.80	4277415.22	4280453.28	4465058.04	1129323.72	1516491.43
1411628.25	1327253.54	494076.12	1331406.45	1328660.83	1404623.62	352482.97	505004.16
421853.57	387620.38	161749.47	391610.55	406022.38	418502.72	101902.70	83974.66
18355197.81	17224456.44	6663863.07	17214321.32	17416191.50	18188035.67	5725589.03	9144465.47
129688.29	125031.17	46528.33	124311	123987.76	126475.33	41162	74421.70
6364187.48	5989932.25	2376604.52	6046908.72	6202151.49	6376005.38	1615693.41	2345262.98
136743.03	113758	46982	118634.99	116508.50	127476.98	23043.98	16716.24
8845136.71	8288315.80	3184230.24	8338776.44	8385571.71	8709248.19	2158185	2784733.71
1317736.34	1210337.21	502868.70	1235276.43	1300759.74	1351039.05	355213.51	794240.94
9138834.02	8665088.81	3392158.71	8698655.51	8888940.07	9157472.99	2229831.37	3262205.80
7618608.28	7202779.98	2822205.81	7215546.39	7361432.58	7604873.98	2259472.04	4027914.39
22850864.81	21449874.15	8294777.40	21556886.97	21755505.87	22567500.20	5553685.02	8850421.66
10984739.14	10368167.69	4096571.66	10449382.41	10697816.76	11032842.18	3212410.87	5403109.39
12987357.41	12222500.58	4741677.75	12280511.91	12454839.63	12895049.63	3296526.75	4251719.61
0	0	0	0	0	0	0	0
831604.06	771066.02	303858.81	781156.83	805335.90	821566.05	180641.32	206928.39
394699.64	352473.54	143279.88	354279.98	351841.26	377877.99	108162.31	298047.83
4966143.05	4588197.30	1859867.38	4644913.15	4769659.38	4975562.50	1293154.54	2205504.02
125861.31	119740.29	44731.99	120570.40	120104.69	122068.76	24086.75	16036.84
7775627.33	7451159.53	2844034.16	7471135.68	7539914.98	7693617.83	1707996.75	2023125.87
9150752.50	8016853.99	3379411.08	8195664.33	8369217.26	8827711.48	1697730.68	1479328.96
1100909.88	1025472.22	395901.46	1046667.82	1059183.62	1095111.72	231893.14	214012.23
24742195.34	22918806.77	9138036.33	22752624.72	23330832.84	23969628.60	7733018.39	11997494.02
6575229.16	6216309.72	2447206.97	6271578.22	6440387.25	6608506.77	1758512.03	2537965.89
1419474.90	1335564.39	534329.06	1331197.85	1365000.01	1428057.96	357491.71	616715.59
5573131.84	5191975.09	2088260.70	5224262.42	5360797.94	5564670.74	1636752.46	2392928.07

611184.12	558677.17	220008.49	572063.39	598672.86	618926.88	115605.37	104811.42
6796079.20	6148272.94	2551388.20	6247747.22	6477299.75	6679105.02	1541997.51	2050993.92
3858509.41	3631765.56	1381513.74	3646173.87	3658025.47	3794806.57	1004127.17	1277456.36
11933042.89	11301282.65	4554966.76	11373102.38	11822332.89	12005044.37	2713783.59	3336652.78
1397122.50	1250836.98	499559.82	1287801.55	1326545.35	1386323.43	284374.70	254630.15
129178.33	120766.61	47169.49	119444.31	121096.46	128010.70	40462.24	97058.95
162025.45	154361.71	64666.66	154271.87	165442.23	162935.30	31971.17	16272.69

C10	C11	C12	C13	C14	C15	C16	C17	C18
5600273.26	2275330.21	4835422.51	7558776.35	2237628.38	2218899.98	2020696.18	2033279.31	8401204.64
7571471.84	4503104.06	6310726.88	12437126.23	4477211.72	4503238.53	4113072.69	4086930.51	11676217.03
1883118.57	884609.98	1526016.34	1959655.76	860087.16	879696.28	798558.97	795733.01	3147704.48
35498.06	23759.07	24949.76	61017.66	23266.46	23601.66	21775.38	21446.67	94221.41
38758.20	26122.15	40399.35	64555.07	26262.36	26842.18	23614.23	24364.67	143991.01
2526929.52	803132.67	2203728.20	2221567.35	766367.94	779700.02	700662.01	716394.93	3711528.24
70384.66	3643.32	65167	2509.18	2252.43	2420	2543	2861.50	24917.15
1839803.32	733106.85	1634829.49	2362553.78	722812.58	718375.82	654944.32	656000.86	2812370.69
626235.10	258087.15	589436.11	630174.58	250920.61	253602.89	233616	232565.56	769207.63
135496.22	53837.52	114556.36	127794.83	51627.94	51968.48	47729.34	47690.86	216645.76
9207082.69	4459998.91	7817726.80	14949943.99	4448277.35	4409499.38	4019033.38	4014381.89	13591496.67
62165.76	25348.40	43406.76	62865.82	24996.85	25307.41	22988.93	23095.11	102606.14
2586788.35	1068734.95	2195017.79	3720675.26	1068908.20	1055400.18	957282.73	967212.45	4348410.02
58994	3184.50	48604	2498.37	2227.54	2197.36	2332	2517.78	31291.24
3850920.98	1298174.13	3517233.89	4132882.49	1272474.60	1253513.47	1148438.84	1154867.30	4479733.71
711536.41	260976.19	598402.92	922949.16	256907.67	253431.12	232084.53	233979.66	990366.29
3646380.12	1521597.57	3159974.96	5988421.96	1533442.17	1495812.77	1359467.63	1371053.66	6963794.26
3282700.71	2267758.71	2696989.79	5690561.40	2252525.43	2276436.72	2084925.12	2058456.30	5463351.69
9738434.94	3709146.25	8480227.66	12926217.69	3690990.74	3641825.32	3312297.14	3319939.30	13070861.50
4238159.62	3057630.38	3434011.11	7904686.56	3048361.33	3076432.64	2812949.46	2779745.91	7266774.80
5568861.20	1878764.30	4883410.57	7581496.07	1873695.34	1828364.84	1650400.32	1675762.84	11675519.36
0	0	0	0	0	0	0	0	50
286164.11	105395.54	260418.52	195054.50	100223.39	103708.22	93609.12	94236.72	361409.58
183081.43	226964.45	165940.73	190719.80	216701.02	228222.42	212211.29	205498.50	222127.11
2237690.27	1109541.19	1906713.99	2754307.09	1083210.29	1096910.65	1003110.57	1000383.54	3858463.00
48610.19	2931.91	47335.93	2457.48	2168.36	2388.79	1808.77	3085.44	97323.86
3858449.34	730490.76	3750472.74	1476550.14	651344.62	664441.91	612352.46	634123.09	3312396.68
4395574.97	349314.40	3915241.84	439130.36	243711.75	258548.29	241268.48	270978.33	4348895.99
480827.17	72456.81	454526.66	84774.01	64118.67	68494.26	58583.59	65842.76	533102.64
13701742.13	6830756.30	11605647.03	15607291.27	6580574.02	6715333.27	6182871.97	6141929.98	19810614.48
2580329.91	1266118.41	2162649.20	3129045.28	1234112.01	1260173.27	1139067.74	1140322.60	4678594.22
631988.24	242721.08	532441.79	697316.23	237294.09	241208.12	214887.24	216310.61	959837.53
2716948.87	1155016.71	2300045.95	3614947.53	1133985.19	1132752.19	1028676.49	1033514.18	3717473.24

340971.64	19886.18	313004.02	133189.32	16438.48	14253.91	13217.37	16371.82	294112.30
3015363.98	932926.64	2612156.70	2403196.61	876348.06	881194.90	814615.71	821318.44	3741503.04
1522875.94	562571.18	1340406.31	1874499.39	558952.53	550464.69	498746.06	504753.77	2236045.74
4425737.85	1260460.66	3826724.67	5124766.88	1233224.03	1195159.34	1077235.30	1105038.69	6757544.94
617494.62	78631.94	540091.88	262361.55	70081.53	67836.45	64215.24	66980.26	516667.91
125877.90	51284.27	103888.77	125630.16	49686.82	50859.37	46142.81	46853.44	190193.09
48092.40	46686.68	46155.52	4371.75	43496.43	46316.05	43141.90	41774.22	103137.91

C19	C2	C20	C3	C4	C5	C6	C7	C8
2931826.98	4644262.67	2321042.75	5488044.22	2706835.10	2216465.97	4794653.69	3688438.23	4562254.93
6107963.05	6799261.79	4819535.47	7857722.21	4334388.61	4355159.92	7887907.32	6237511.70	6222119.97
1196603.21	1615045.40	853490.17	2366522.66	1071239.54	885005.74	1602570.45	1102194.09	1466181.57
32039.37	37238.14	25196.23	57421.65	21156.23	23423.86	41324.43	30715.89	25575.02
54172.12	40327.29	46900.88	80595.39	26107.39	27221.63	92626.41	33622.86	49952.26
1038001.91	2024549.78	831839.72	2418719.91	1132080.53	780828.10	2308210.91	1169414.70	2088702.30
3338	46097.68	4810.64	34328.34	21787.82	4870.18	21961.15	6400.18	60004.68
895042.05	1598697.38	723632.73	1847391.16	889283.17	722661.73	1824851.15	1176436.27	1594990.03
342799.07	515553.93	278432.72	544126.38	306000.05	262857.43	482286.97	342538.13	551837.18
67961.51	133478.55	52738.22	139171.81	55618.94	51807.73	109277.42	70598.41	119498.71
5798787.27	8059086.50	4555467.38	9716324.11	5020003.20	4375303.43	10089756.69	7387685.31	7927099.60
40937.56	51216.72	32004.35	57944.19	39582.65	25383.81	48967.98	34589.46	41981.76
1620124.22	2158868.38	1309408.27	2621156.64	1303902.13	1049040.90	2400503.56	1755040.65	2148061.47
3620	54577.01	4093.98	38828	19835.49	5004.51	30455.99	5897.51	50205.01
1554517.34	3139945.74	1268156.11	3362744.14	1682163.94	1277218.26	3372867.52	2227322.96	3261706.38
317742.18	537463.75	255404.56	602505	361093.02	254546.10	476872.21	653279.98	582210.65
2113109.59	3190669.46	1840818.88	3913456.50	1795263	1501972.73	3632024.85	2811740.78	3193287.83
2920109.12	3011371.57	2264851.94	3513868.32	2023337.95	2193655.45	3468527.59	2984837.50	2736244.91
4985005.20	8164899.26	4089109.81	9446576.58	4948130.25	3730704.26	9728261.66	6494734.78	8500281.51
4114041.76	3962343.66	3182765.48	4482577.04	2661430.23	2932798.96	4672209.51	4030581.05	3450404.23
2629697.23	4551022.88	2176700.98	5525201.63	2531085.69	1884816.45	4968750.53	3514502.25	4792907.43
0	0	0	0	417	0	11	15	0
136405.87	253500.11	118504.83	383060.81	124503.38	105237.54	346069.52	142529.60	252275.54
193432.19	223401.98	154816.88	246561.82	113622.70	207651.42	256380.31	280992.23	158482.12
1394415.94	1966060.01	1127581.42	2166552.82	1231924.04	1071495.78	2016694.85	1526652.38	1851188.57
21668.75	32601.56	22856.72	49526.29	14661.91	3094.51	57665.44	4972.94	37273.29
824039.44	2768129.98	733148.83	2749262.99	1407620.38	725882.94	3557770.31	1232183.15	3297874.43
430432.26	3885363.63	441151.20	3230367.74	1510076.75	386544.96	2413317.28	551575.92	3885778.67
176100.52	319659.05	158034.64	440671.23	170022.42	72627.77	472120.75	99586	401975.33
7756591.95	12048920.31	6311569.68	12614647.78	7191732.93	6613029.10	14010492.54	9044103.47	12136888.12
1538480.48	2213515.99	1247996.54	2663786.94	1337534.77	1227400.35	2257091.67	1795311.85	2147851.68
349818.64	557825.23	254112.81	807922.86	349364.36	259657.94	619434.80	400066.50	572344.64
1481960.87	2269193.97	1152105.73	2519727.37	1395218.13	1105003.42	2448456.22	1794546.39	2255374.14

37857.14	226730.30	43294.57	213537.98	105728.97	27189.60	144587.24	72961.78	294535.13
970791.74	2658290.27	883300.64	2517196.20	1337563.67	896171.84	2223062.79	1448052.17	2476626.77
848192.77	1267502.43	682319.45	1468926.78	718772.20	564810.50	1542327.36	1007354.61	1269365.74
1604462.74	3712895.86	1357588.69	4479380.99	1924870.34	1255775.98	3663118.69	2572063.27	3673296.43
102815.03	489673.28	98172.31	403862.57	214873.44	89503.69	338134.22	161672.64	524556.30
77000.93	87611.80	64473.32	112413.49	60479.36	48887.98	114778.81	67808.47	102442.15
16876.40	54908.46	21271.54	67872.80	16007.52	44059.79	41660.48	21110.21	43458.86



C9	D1	D10	D11	D12	D13	D14	D15
5427248.04	2761798.11	2228422.87	2073576.37	6923801.36	5772277.23	5294505.40	4468438.79
7054867.24	5226948.02	4449703.34	4190430.97	11278650.30	8290395.98	7022616.09	6615974.93
1867954.72	999830.53	870304.23	814499.66	1802705.96	1916524.16	1762447.99	1559359.01
29097.50	25916.45	23616.10	22417.79	55510.08	47557.55	26477.37	28012.46
38113.22	45122.62	26788.56	23769.36	58295.87	69767.60	55637.38	40391.82
2574242.03	1051920.17	789317.77	716983.01	2082279.51	2409770.25	2450542.82	2033388.43
73818.34	12592.16	2522	2499.66	5280.34	47079.36	65159.02	45240.64
1787449.29	876211.35	717989.15	667946.25	2166324.68	1946113.52	1834347.46	1538628.39
614398.75	328362.63	251130.18	237214.88	582040.62	618418.23	629441.60	487930.64
135268.15	66151.65	52488.40	48817.36	118421.22	151128.05	123837.19	120583.99
9142728.21	5289938.47	4392746.42	4081608.70	13612933.35	9754024.26	9289672.57	8115179.52
58209.13	32675.91	24783.12	23118.81	57751.45	68922.72	53752.21	55274.79
2463898.75	1454299.44	1052008.38	983934.07	3386188.88	2832728.20	2373274.77	2160027.68
64176	10384	2301.20	2687.49	4433.51	50428.02	49997	41437.98
3851161.39	1630086.50	1255620.95	1174469.09	3814088.67	3745102.29	4000467.51	3036552.47
690122.22	310483.66	253110.54	237270.84	847679.43	725113.65	619257.99	567880.88
3643941.05	2077818.83	1503776.53	1397511.84	5441257.48	4231301.06	3652339.34	2931915.37
2979718.57	2461555.05	2241410.76	2116957.10	5148002.94	3747584.55	3049981.53	2937552.25
9507518.49	4880694.14	3650118.04	3384893.09	11823450.79	9980296.70	9556165.53	7643588.38
3778387.57	3374518.86	3025059.63	2862701.58	7128456.47	4995564.39	3821086.97	3769729.91
5481992.69	2650936.09	1851153.74	1704152.11	6934403.27	6639261.78	5485131.74	4485599.27
0	0	0	0	0	0	0	0
273957.55	138814.35	104577.40	96402.28	183566.36	293968	284642.11	226080.07
164570.18	171606.60	222361.94	214200.04	175356.14	246796.21	174453.44	180333.98
2240229.25	1293974.14	1091325.02	1022666.38	2529119.08	2452139.06	2120335.14	1885411.94
48228.67	20669.98	2668.21	1764.69	4050.71	54544.16	52026.37	36248.94
3896318.51	1056940.55	676127.62	618680.94	1473226.19	3346207.37	4201212	2755409.59
5001240.37	954798.41	309444.21	249338.42	594144.08	3691295.22	4212738.22	3178059.36
459261.44	179854.57	71368.45	61241.45	92991.88	443981.97	511255.30	363527.74
14473709.70	7428787.76	6696011.25	6244275.19	14426626.81	14019187.07	13253594.96	11407667.56
2383376.27	1452816.93	1258125.93	1169998.24	2873652.03	2793345.46	2345094.37	2230191.01
644557.58	320191.97	243689.94	218356.16	643866.13	682434.39	676208.28	533855.60
2735621.61	1410412.41	1139740.93	1050102.36	3320500.19	2642919.33	2551615.61	2255531.86

353192	76850.85	15938.37	14250.14	132243.91	280382.70	317359.21	229970.47
3229727	1153552.04	896177.61	835219.74	2268244.71	2829599.43	2843497.11	2310161.86
1458340.50	774119.29	549855.86	510635.94	1716058.21	1652845.39	1585560.75	1271159.85
4467473.01	1800254.79	1238851.92	1122721.95	4733518.90	4401405.46	4134198.22	3453294.87
635880.13	157188.74	70073.44	67529.08	258222.04	532152.80	550499.02	415060.20
124336.98	69668.96	50400.33	46745.95	116197.39	121849.01	121722.91	93079.86
50146.05	31435.77	45356.36	44083.99	5476.38	56081.86	48207.47	43310.31

D16	D17	D18	D19	D2	D20	D3	D4	D5
5040732.09	3675181.14	2272281	2113118.75	6380348.40	2249228.04	8007886.95	3235862.37	7970505.02
8619818.40	6068228.22	4599262.57	4356217.63	8954840.63	4385594.07	13098640.54	4213027.97	10394961.26
1426386.29	1005226.59	887364.65	841116.23	2142684.31	863355.35	2087391.04	1081574.19	3168638.47
42863.51	30285.41	24083.02	23080.21	43776	21907.29	64178.16	17385.67	63920.82
45800.43	32064.41	26402.83	25008.57	66249.76	25966.85	68944.10	17918	104646.39
1532866.67	1049117.34	779464.87	723795.37	2759278.90	819349.42	2398059.91	1602451.94	4264477.22
2928	1119.68	2432.27	1576.14	82392.16	5628.14	6372.68	50202.32	2958.68
1589760.05	1157814.66	734766.51	682273.12	2265608.86	730218.38	2506999.44	1096317.02	2159573.60
448648.72	309723.49	258980.62	243308.41	775820.74	257029.92	679008.34	381781.11	476308.58
91304.55	63049.93	52818.76	49779.51	178078.89	53012.71	138434.09	80310.99	172203.78
9968769.28	7652939.81	4522320.29	4217206.34	11074856.04	4420570.31	15772229.70	5471881.85	13205733.94
45053.76	30988.98	25726.40	24120.65	64018.55	25775.80	66547.05	34850.83	68650.77
2469227.57	1749369.35	1081620.97	1006078.09	3038125.93	1067048.56	3932179.43	1479656.49	3304818.55
3144	1153.01	2286.25	1467.48	79550.51	4555.48	5387.51	41592.99	3269.01
2782973.32	2267049.53	1287393.60	1189297.03	4601929.26	1314546.60	4416288.45	2350153.56	3389832.77
611787.25	880448.05	261527.04	241832.64	782000.98	261153.26	977367.70	440736.92	946167.97
3885609.07	2938134.60	1533165.69	1419744.34	4362139.78	1497644.62	6326961.96	2146493.92	4692249.84
4023857.76	2918559.79	2321122.44	2211370.84	3905327.14	2191431.75	5983678.11	1765226.39	4855106.97
8575050.83	6708043.46	3722236.96	3452121.30	11893564.26	3716345.30	13736516.31	5708483.59	9772352.58
5556904.07	3928710.51	3142482.52	2992262.66	5049446.91	2938603.36	8291604.33	2187099.95	6208967.69
4903841.64	3573238.68	1875560.77	1717534.89	6619455.93	1905149.31	8056894.90	3309511.21	6165410.36
0	6	0	0	2244	0	0	75	0
149079.85	143506.77	103287.56	97856.45	396182.28	105423.43	214499.35	168105.13	266910.08
194943.70	355946.29	231452.40	226904.83	263623.44	210523.51	203252.33	105167.32	220578.09
1948861.90	1492136.49	1113926.38	1054812.05	2662572.28	1085419.68	2934613.67	1351329	3041437.95
2830.82	1496.34	2030.13	1500.85	63907.30	4343.99	4577.21	29735.66	60191.64
1108522.42	1170442.63	684188.75	613941.02	4060207.37	799243.73	1681982.28	2479160.65	2370610.40
381735.37	235179.60	244160.19	195296.59	5201778.39	442124.58	689670.88	3080344.82	3380980.25
75763.01	73434.72	64865.83	59075.28	594418.37	83795.52	110601.77	298463.60	287217.79
11252295.22	8549079.41	6825230.33	6473034.99	15921044.81	6648720.67	16668233.55	8700383.23	19710487.08
2214875.74	1832446.95	1267858.13	1201063.49	2986115.55	1238014.59	3332363.94	1438231.40	4708457.51
476948.50	419557.03	240303.35	224507.04	817037.19	243327.61	749718.08	372505.59	747637.19
2431371.91	1770272.94	1149987.48	1074785.47	3119692.66	1150530.12	3843174.66	1635440.59	4324366.49

81500.77	64734.90	14785.20	9529.23	380036.67	30515.61	153740.86	233984.28	134215.07
1685976.10	1406566	897314.32	836513.65	3431980.96	921639.32	2611296.85	1961982.76	3694207.86
1253283.29	1070806.86	563091.68	520046.68	1854406.91	565169.07	1991037.37	878702.55	1607236.47
3299346.99	2791322.97	1219101.71	1109513.68	4992491.49	1277450.97	5485124.86	2597731.94	6656845.09
177249.53	142884.09	70172.85	59733.01	751134.65	88471.46	299578.26	407419.07	243998.70
89259.46	61908.50	51354.71	48370.63	128775.29	52066.62	134386.67	79824.32	179020
20344.72	2910.18	46589.01	46338.31	52631.41	42494.50	6932.82	30177.66	53689.25

D6	D7	D8	D9
5837235.59	6017283.28	2086672.94	5999616.32
7945811.61	8338683.18	4098161.43	7941101.82
2037273.90	2044536.24	814918.64	2252015.80
34132.87	46029.09	21443	38476.36
54216.76	66178.32	24854.65	58488.36
2732641.90	2783734.80	755014.55	2996555.83
73560.38	74190.02	4436.18	50216.14
2014367.70	2133086.86	677967.95	1866174.36
702688.77	725187.07	239109.88	562687.67
152611.11	178494.37	49422.95	148011.63
10333621.48	10175815.88	4094274	10222307.83
68224.19	60751.59	23219.96	58541.57
2657572.13	2840794.15	988640.86	2688488.67
62239.57	71785.01	3920.01	44749.91
4101158.40	4224357.65	1207892.86	3594731.20
727102.68	751861.49	239192.99	748131.17
3947769.64	4301370.88	1419210.53	3889142.56
3459317.31	3670134.71	2050879.81	3521066.51
10248915.52	11127657.48	3466220.48	9640911.25
4422054.60	4629268.22	2761900.58	4476849.44
5931972.06	6415805.62	1767412.09	5710344.40
0	0	0	0
286674.04	322567.37	100180.66	270721.48
201307.55	226640.54	200170.61	182379.70
2400383.13	2477575.17	1014498.56	2414825.49
52978.94	58979.59	3470.48	50776.62
4391925.79	3921280.87	697569.36	3347425.93
4877011.74	5220914.16	390257.25	4536312.77
493721.66	505681.01	76775.73	410467.27
16235723.53	16267317.44	6223270.68	15474603.88
2681304.15	2827337.57	1164744.09	3051830.80
716365.02	722675.80	233527.17	708208.96
2903868.28	2942401.07	1065087.21	3153357.79

363550.61	377275.19	23706.71	282266.08
3259431.75	3346365.89	860960.97	3240061
1629863.13	1702219.61	522722.71	1472400.33
4608913.36	4897754.52	1183671.95	5070756.77
623007.50	685890.60	78586.07	489447.24
127732.11	129126.91	47528.99	133893.40
57501.16	61929.62	41096.07	61649.18