Table S8C. Gene Ontology (GO) Cellular Component Analysis

GO ID	GO Term	Term P value	No. of Genes	Associated Genes Found
GO:1903561	extracellular vesicle	1.49E-32	97	ACTB, ACTN1, ACTN4, ADD3, ALYREF, ATP1A1, ATP1B1, ATP2B1, CCT2, CCT3, CCT4, CCT5, CCT7, CCT8, CFL1, CLTC, CSE1L, CUL4B, DDX5, DNAJB1, EZR, EEF1A1, EEF1G, EEF2, ENO1, FBL, FLNA, FLNB, GAPDH, H2AC20, H2AX, H2BC21, H4-16, HIC1, HIC11, HIC12, HIC13, HIC14, HIC15, HIC2, HIC3, HIC4, HIC5, HIC6, HIC8, HNRNPK, HNRNPM, HSPA8, HSPD1, IQGAP1, JUP, KRT18, LDHA, LDHB, LGALS3BP, MACROH2A1, NCL, NCOA3, PHB, PDCD6, PHB, PHGDH, PKM, PPIA, PRDX1, PRKCB, PSMA5, PSMA7, RAN, RBMX, RPL10A, RPL11, RPL14, RPL23, RPL5, RPLP0, RPS16, RPS19, RPS2, RPS20, RPS3, RPS4X, RPS8, RPSA, SLC25A3, SPTBN1, SSBP1, TCP1, TUFM, TPI1, TPM3, TUBA1A, TUBA4A, TUBB4B, UBA1
GO:0005681	spliceosomal complex	1.717E-24	30	ALYREF, DDX5, DHX15, EFTUD2, HNRNPF, HNRNPH1, HNRNPK, HNRNPM, HNRNPR, NCL, PRPF19, PRPF40A, PRPF8, RBM7, SF1, SF3A1, SF3B1, SF3B2, SF3B3, SNRNP200, SNRNP70, SNRPA1, SNRPB, SRRM1, SRSF1, SRSF2, SYNCRIP, TRA2A, U2AF2, UPF1
GO:0071013	catalytic step 2 spliceosome	1.157E-21	21	ALYREF, DDX5, EFTUD2, HNRNPF, HNRNPH1, HNRNPK, HNRNPM, HNRNPR, PRPF19, PRPF8, RBM39, SF3A1, SF3B1, SF3B2, SF3B3, SNRNP200, SNRNP70, SNRPA1, SNRPB, SRRM1, SRSF1, SRSF2, SYNCRIP
GO:0000794	nuclear chromosome, telomeric region	7.341E-20	23	ALYREF, ATR, HIF-1α, HIC1, HIC11, HIC12, HIC13, HIC14, HIC15, HIC2, HIC3, HIC4, HIC5, HIC6, HIC8, HIC9, MACROH2A1, MRE11, MSH2, PRKDC, TP53BP1, UPF1, XRCC5
GO:0000793	chromosome, telomeric region	1.222E-19	25	ALYREF, ATR, CHEK1, H2AX, H4-16, HIC1, HIC11, HIC12, HIC13, HIC14, HIC15, HIC2, HIC3, HIC4, HIC5, HIC6, HIC8, HIC9, MACROH2A1, MRE11, MSH2, PRKDC, TP53BP1, UPF1, XRCC5
GO:0022626	cytosolic ribosome	8.657E-19	21	RPL10A, RPL11, RPL13, RPL14, RPL23, RPL5, RPL6, RPL7, RPL8, RPLP0, RPS16, RPS19, RPS2, RPS20, RPS21, RPS3, RPS4X, RPS8, RPSA, RPSA
GO:0016607	chromosomal region	1.761E-18	22	ALYREF, ATR, AURKB, CENPB, CHEK1, CSNK1A1, DAXX, H2AX, H4-16, HIC1, HIC11, HIC12, HIC13, HIC14, HIC15, HIC2, HIC3, HIC4, HIC5, HIC6, HIC8, HIC9, MACROH2A1, MRE11, MSH2, PRKDC, RAD21, SMC1A, SMC3, TP53BP1, UPF1, XRCC5
GO:0000786	nucleosome	2.151E-17	14	H4-16, HIC1, HIC11, HIC12, HIC13, HIC14, HIC15, HIC2, HIC3, HIC4, HIC5, HIC6, HIC8, H4C16
GO:0000228	nuclear chromosome	1.250E-16	57	ACTB, ALYREF, ATR, AURKB, CCAR2, CENPB, CHD4, CHEK1, E2F1, H2AC20, H2AX, H4-16, HIC1, HIC11, HIC12, HIC13, HIC14, HIC15, HIC2, HIC3, HIC4, HIC5, HIC6, HIC8, HIC9, HNRNPD, HNRNPK, KAT2A, MACROH2A1, MRE11, MSH2, MTA2, NCOA3, NCOR1, NCOR2, PRKDC, PRPF19, RAD21, RBBP4, RBBP7, RBM7, SF3B3, SMARCA4, SMARCB1, SMARCC1, SMARCE1, SMC1A, SMC3, TARDBP, TCP1, TOP1, TP53BP1, TUBB3, UPF1, XRCC5, YY1
GO:0005925	focal adhesion	1.627E-16	33	ACTB, ACTN4, ACTN4, CCL5, CLTC, CTNNA1, DIAPH1, FLNA, FLNB, HNRNPK, IQGAP1, JAM1, JUP, LIMA1, PKN8, PAK1, PPIA, RPL10A, RPL23, RPL5, RPL6, RPL7, RPL8, RPL9, RPLP0, RPS16, RPS19, RPS2, RPS3, RPS4X, RPS8, TLN1
GO:0005786	nucleosome	1.380E-15	18	H2AC20, H2AX, H2BC21, H4-16, HIC1, HIC11, HIC12, HIC13, HIC14, HIC15, HIC2, HIC3, HIC4, HIC5, HIC6, HIC8, MACROH2A1
GO:0016604	nuclear body	1.872E-14	41	ACTN4, ALYREF, ATR, CRY2, CSNK1A1, DAXX, DDX1, DDX17, DHX15, DYRK1A, EFTUD2, FBL, H2AX, HDAC5, HNRNPM, INPPL1, MRE11, NCOR2, NONO, NSF1, PRPF19, PRPF40A, PRPF8, RBM39, SF1, SF3A1, SF3B1, SF3B2, SF3B3, SFPQ, SIL, SNRNP70, SNRPA1, SRRM1, SRSF1, SRSF2, SRSF3, TARDBP, TP53BP1, U2AF2, UBXN7
GO:0044391	ribosomal subunit	4.611E-14	21	RPL10A, RPL11, RPL13, RPL14, RPL23, RPL5, RPL6, RPL7, RPL8, RPL9, RPLP0, RPS16, RPS19, RPS2, RPS20, RPS21, RPS3, RPS4X, RPS8, RPSA
GO:0005840	ribosome	5.536E-14	23	EEF2, RPL10A, RPL11, RPL13, RPL14, RPL23, RPL5, RPL6, RPL7, RPL8, RPL9, RPLP0, RPS16, RPS19, RPS2, RPS20, RPS21, RPS3, RPS4X, RPS8, RPSA, SF1
GO:0016607	nuclear speck	1.114E-13	29	ALYREF, CRY2, CSNK1A1, DDX17, DHX15, DYRK1A, EFTUD2, H2AX, HDAC5, INPPL1, NONO, NSF1, PRPF19, PRPF40A, PRPF8, RBM39, SF3A1, SF3B1, SF3B2, SF3B3, SFPQ, SNRNP70, SNRPA1, SRRM1, SRSF1, SRSF2, SRSF3, TARDBP, U2AF2
GO:0005730	nucleolus	4.333E-12	41	CLOCK, CSNK2A, DHX2, DHX9, DDX17, DDX21, DDX5, DHX15, DNAJC1, EEF1A1, FBL, FLNA, HNRNPM, ISY1, ISY1, MTF1B, MACROH2A1, NCL, NONO, NOP2, NUP153, PRKDC, RAN, RPL11, RPL13, RPL23, RPL5, RPL7, RPL9, RPS3, RPS6, SENP3, SF3B1, SKP2, SMARCA4, SMARCA5, SMARCB1, SPTBN1, TOP1, TRA2A, XRCC5
GO:0005684	U2-type spliceosomal complex	1.266E-11	14	DHX15, EFTUD2, PRPF19, PRPF40A, PRPF8, SF3A1, SF3B1, SF3B2, SF3B3, SNRNP200, SNRNP70, SNRPA1, SNRPB, U2AF2
GO:0005911	cell-cell junction	7.307E-11	37	ACTB, ACTN1, ACTN4, ATP1A1, CDH23, CFL1, CLTC, CTNNA1, DHB2, FLNA, FLNB, HNRNPK, ILF3, IQGAP1, JAM1, JUP, KRT18, LIMA1, PHB, PAK1, PPA, RPL10A, RPL23, RPL5, RPL6, RPL7, RPL8, RPL9, RPLP0, RPS16, RPS19, RPS2, RPS3, RPS4X, RPS8, TLN1, UBA1
GO:0043657	host cell	1.048E-10	20	ICOSL, H4-16, HIC1, HIC11, HIC12, HIC13, HIC14, HIC15, HIC2, HIC3, HIC4, HIC5, HIC6, HIC8, HIC9, KPNA1, NUP153, NSF1, RAN, RANBP2
GO:0022625	cytosolic large ribosomal subunit	2.262E-10	11	RPL10A, RPL11, RPL13, RPL14, RPL23, RPL5, RPL6, RPL7, RPL8, RPL9, RPLP0
GO:0043005	host cell nucleus	4.039E-10	17	ICOSL, H4-16, HIC1, HIC11, HIC12, HIC13, HIC14, HIC15, HIC2, HIC3, HIC4, HIC5, HIC6, HIC8, HIC9, KPNA1, NSF1
GO:0022627	cytosolic small ribosomal subunit	6.598E-10	10	RPS16, RPS19, RPS2, RPS20, RPS21, RPS3, RPS4X, RPS6, RPS8, RPSA
GO:0034399	nuclear periphery	2.037E-09	14	CSNK1A1, CFL1, HNRNPM, MATR3, NCOA3, NCOR2, NUP153, PRPF40A, RAD21, SFPQ, SMC1A, SMC3, SRRM1, YY1
GO:0097525	spliceosomal snRNP complex	6.493E-09	10	EFTUD2, PRPF40A, PRPF8, SF3A1, SF3B1, SF3B2, SNRNP200, SNRNP70, SNRPA1, SNRPB
GO:0071005	U2-type precatalytic spliceosome	1.075E-08	9	EFTUD2, PRPF8, SF3A1, SF3B1, SF3B2, SF3B3, SNRNP200, SNRPA1, SNRPB
GO:0000118	histone deacetylase complex	4.496E-08	10	CHD4, HDAC1, HDAC5, HDAC6, MTA2, NCOR1, NCOR2, RBBP4, RBBP7, ZFP36L1
GO:0071004	U2-type prespliceosome	1.002E-07	6	PRPF40A, SF3A1, SF3B1, SNRNP70, SNRPA, U2AF2
GO:0017053	transcription repressor complex	1.425E-07	10	ICOSL, CHD4, HDAC1, HDAC5, MTA2, NCOR1, NCOR2, RBBP4, RBBP7, SIX1
GO:0070603	SWI/SNF superfamily-type complex	1.425E-07	10	CHD4, MTA2, RBBP4, RBBP7, SMARCA4, SMARCA5, SMARCB1, SMARCC1, SMARCC2, YY1
GO:0005874	microtubule	7.334E-07	20	AURKB, CCT2, CCT3, CCT4, CCT5, CCT7, CCT8, CDC27, CLTC, DAP3, HDAC6, IQGAP1, TCP1, TUBA1A, TUBA1B, TUBA1C, TUBA4A, TUBB4B, TUBG1, TUBGCP3
GO:0005844	polysome	1.012E-06	9	EEF2, FUS, RPL10A, RPL11, RPL5, RPL8, RPS21, RPS3, RPSA
GO:0016468	cytoplasmic ribonucleoprotein granule	1.353E-06	14	ACTB, DDX1, HNRNPK, IQGAP1, NCL, NSF1, RPS6, RPLP0, RPS6, RPSG, TARDBP, TOP1, TUBA1A, UPF1
GO:0042788	polysomal ribosome	3.800E-06	6	EEF2, RPL10A, RPL11, RPL5, RPL8, RPS21
GO:1904813	ficolin-1-rich granule lumen	9.312E-06	10	ALDOA, CCT8, EEF1A1, EEF2, HSPA8, ILF2, JUP, PKM, PPIA, PSMA5
GO:0005686	U2 snRNP	9.466E-06	5	SF3A1, SF3B1, SF3B2, SNRPA1, SNRPB
GO:0071564	npBAF complex	1.023E-05	4	SMARCA4, SMARCB1, SMARCC1, SMARCC2
GO:0034774	secretory granule lumen	1.096E-05	16	ACTN4, ACTN4, ALDOA, CCT2, CCT8, EEF1A1, EEF2, HSPA8, ILF2, JUP, LGALS3BP, PKM, PPIA, PSMA5, TUBB4B, XRCC5
GO:0005689	U12-type spliceosomal complex	1.439E-05	5	DHX15, SF3B1, SF3B2, SF3B3, SNRPB
GO:0071565	nBAF complex	3.741E-05	4	SMARCA4, SMARCB1, SMARCC1, SMARCC2
GO:0071007	U2-type catalytic step 2 spliceosome	2.591E-05	5	EFTUD2, PRPF19, PRPF8, SNRPA1, SNRPB
GO:0045261	proton-transporting ATP synthase complex, catalytic core F(1)	3.579E-05	3	ATP5F1A, ATP5F1B, ATP5F1C
GO:0000793	condensed chromosome	3.931E-05	12	AURKB, CENPB, CHEK1, CSNK1A1, H2AX, MACROH2A1, RAD21, SMARCA5, SMC1A, SMC3, TP53BP1, TUBG1
GO:0000793	condensed chromosome	3.931E-05	12	AURKB, CENPB, CHEK1, CSNK1A1, H2AX, MACROH2A1, RAD21, SMARCA5, SMC1A, SMC3, TP53BP1, TUBG1
GO:0005657	replication fork	5.329E-05	7	CHEK1, H2AX, MRE11, PRIP DI, SMARCA5, TOP1, TP53BP1
GO:0042382	paraspeckles	6.265E-05	3	SNRNP70, NONO, SFPQ
GO:0030893	meiotic cohesin complex	6.265E-05	3	RAD21, SMC1A, SMC3
GO:0030132	clathrin coat of coated pit	7.487E-05	4	AP2B1, CLTC, EPS15, PICALM
GO:0016514	SWI/SNF complex	1.114E-04	4	SMARCA4, SMARCB1, SMARCC1, SMARCC2
GO:0016581	NuRD complex	1.373E-04	4	CHD4, MTA2, RBBP4, RBBP7
GO:0000794	condensed nuclear chromosome	1.581E-04	7	AURKB, CHEK1, H2AX, RAD21, SMC1A, SMC3, TUBG1
GO:0034709	methylosome	3.727E-04	3	PRMT5, SNRPB, WDR77
GO:0030017	sarcomere	4.113E-04	10	ACTN4, ACTN4, ALDOA, ENO1, FLNA, FLNB, ILF, PAK1, SPTBN1, TPM3
GO:0034708	methyltransferase complex	4.241E-04	7	HOTC1, PRMT5, RBBP4, RBBP7, SENP3, SNRPB, WDR77
GO:0071006	U2-type catalytic step 1 spliceosome	4.801E-04	3	PRPF19, PRPF8, SNRNP200
GO:0043209	myelosome	5.660E-04	7	ATP1A1, CCT4, CCT7, PKN8, PRDX1, RAN, RPL9
GO:0000803	sex chromosome	5.413E-04	4	H2AX, MACROH2A1, SMARCB1, SMARCC1
GO:0030120	vesicle coat	6.719E-04	5	AP2B1, CLTC, EPS15, PSD3L, PICALM
GO:0046540	U4/U6 x U5 tri-snRNP complex	6.565E-04	4	EFTUD2, PRPF8, SNRNP200, SNRPB
GO:0030863	cortical cytoskeleton	7.510E-04	7	ACTB, ACTN4, CFL1, EEF1A1, FLNA, PRKCB, SPTBN1
GO:0014704	intercalated disc	7.974E-04	5	ACTN4, ATP1A1, CTNNA1, JUP, PAK1
GO:0005876	spindle microtubule	8.336E-04	5	AURKB, CDC27, CLTC, TUBG1, TUBGCP3
GO:0000775	chromosome, centromeric region	1.052E-03	9	AURKB, CENPB, CSNK1A1, DAXX, MACROH2A1, RAD21, SMC1A, SMC3, TP53BP1
GO:0005682	U5 snRNP	1.101E-03	3	PRPF8, SNRNP200, SNRPB
GO:0035955	SCF ubiquitin ligase complex	1.141E-03	5	CUL4A, CUL4B, RBX1, SKP1, SKP2
GO:0030669	clathrin-coated endocytic vesicle membrane	1.602E-03	4	AP2B1, CLTC, EPS15, PICALM
GO:0070822	Sin3-type complex	1.079E-03	3	NCOR1, RBBP4, SF3B1
GO:0001725	stress fiber	2.184E-03	5	ACTN1, ACTN4, FLNB, LIMA1, TPM3
GO:0000753	mitochondrial proton-transporting ATP synthase complex	2.382E-03	3	ATP5F1A, ATP5F1B, ATP5F1C
GO:0005685	U1 snRNP	2.382E-03	3	PRPF40A, SNRNP70, SNRPB
GO:0031674	I band	3.005E-03	7	ACTN1, ACTN4, ALDOA, TCAP, TUBB, UJP, PAK1
GO:0005726	nucleolus	3.206E-03	8	ACTN1, CFL1, EEF1A1, IQGAP1, LIMA1, PAK1, RPL5, TLN1
GO:0005881	cytoplasmic microtubule	3.417E-03	5	NDA01, TUBA1A, TUBA1B, TUBA1C, TUBG1
GO:0016587	histone methyltransferase complex	3.417E-03	5	HOTC1, PRMT5, RBBP4, RBBP7, SENP3
GO:0031430	M band	3.879E-03	3	ALDOA, ENO1, SPTBN2
GO:0031461	cullin-RING ubiquitin ligase complex	4.534E-03	7	CDC27, CUL4A, CUL4B, RNTD6, RBX1, SKP1, SKP2
GO:0090734	site of DNA damage	5.330E-03	5	H2AX, MRE11, PRPF19, TP53BP1, XRCC5
GO:0030864	cortical actin cytoskeleton	2.419E-02	4	CFL1, EEF1A1, PRKCB, SPTBN1