

Table S1: Gene ontology (GO) terms and Uniprot Keywords enriched among genes identified as differentially expressed between protected and unprotected groups.

Only terms or keywords with ten or more occurrences are shown (Count ≥ 10). The percent (%) column shows the fraction of genes in the differential set relative to the total number of genes with that annotation.

Term	Count	%	P value	Affymetrix probeset	Gene
GO:0005794 Cellular Component: Golgi apparatus	10	5.08	0.034	BT.18123.2.S1_AT	golgin, RAB6 interacting (GORAB)
				BT.5935.2.S1_A_AT	lysosomal protein transmembrane 4 alpha (LAPTM4A)
				BT.2846.1.A1_AT	ras homolog family member U (RHOU)
				BT.26610.3.S1_A_AT	adaptor related protein complex 4 mu 1 subunit (AP4M1)
				BT.8800.1.S1_AT	ST3 beta-galactoside alpha-2,3-sialyltransferase 3 (ST3GAL3)
				BT.4786.1.S1_AT	clathrin heavy chain (CLTC)
				BT.10928.1.A1_AT	retinitis pigmentosa GTPase regulator (RPGR)
				BT.9215.2.S1_AT	WW domain containing oxidoreductase (WWOX)
				BT.17757.1.S1_AT	solute carrier family 35 member A5 (SLC35A5)
SP:phosphoprotein	38	19.29	0.034	BT.13163.1.S1_AT	adaptor-related protein complex 2, beta 1 subunit (AP2B1)
				BT.11005.1.S1_AT	SH3 binding domain protein 5 like (SH3BP5L)
				BT.384.1.S1_AT	crystallin beta A4 (CRYBA4)
				BT.8712.1.S1_AT	stromal interaction molecule 1 (STIM1)
				BT.13716.1.S1_A_AT	tonsoku-like, DNA repair protein (TONSL)
				BT.5021.1.S1_AT	fibrillin 1 (FBN1)
				BT.12071.2.S1_AT	sirtuin 7 (SIRT7)
				BT.4713.1.S1_AT	Proopiomelanocortin (POMC)
				BT.15741.1.S1_AT	WD repeat domain 48 (WDR48)
				BT.19954.1.A1_AT	ERCC excision repair 3, TFIIH core complex helicase subunit(ERCC3)
				BT.29872.1.S1_AT	cyclin T1 (CCNT1)

BT.1054.1.S1_AT	Rho/Rac guanine nucleotide exchange factor 18 (ARHGEF18)
BT.6795.1.S1_AT	actin related protein 2/3 complex subunit 3 (ARPC3)
BT.5517.1.S1_AT	2',3'-cyclic nucleotide 3' phosphodiesterase (CNP)
BT.22848.1.S1_AT	zinc finger CCCH-type and G-patch domain containing (ZGPAT)
BT.20043.1.S1_AT	dual specificity phosphatase 14 (DUSP14)
BT.20392.1.A1_AT	eukaryotic translation initiation factor 3 subunit J (EIF3J)
BT.13391.1.S1_AT	capping actin protein of muscle Z-line alpha subunit 2 (CAPZA2)
BT.AFFX.1.20.S1_AT	regulator of G-protein signaling 20 (RGS20)
BT.12770.1.A1_AT	synuclein alpha (SNCA)
BT.18623.1.A1_AT	microtubule associated protein RP/EB family member 2 (MAPRE2)
BT.16026.1.S1_AT	potassium channel regulator (KCNRG)
BT.22700.1.A1_AT	phosphatidylinositol-5-phosphate 4-kinase type 2 gamma (PIP4K2C)
BT.17757.1.S1_AT	solute carrier family 35 member A5 (SLC35A5)
BT.28097.1.S1_AT	integrator complex subunit 7 (INTS7)
BT.26610.3.S1_A_AT	adaptor related protein complex 4 mu 1 subunit (AP4M1)
BT.4263.1.S1_AT	G protein-coupled receptor kinase 5 (GRK5)
BT.4134.1.A1_AT	serologically defined colon cancer antigen 3 (SDCCAG3)
BT.25720.1.S1_AT	flotillin 2 (FLOT2)
BT.4786.1.S1_AT	clathrin heavy chain (CLTC)
BT.11489.2.A1_AT	histone cluster 1, H3e (HIST1H3E)
BT.13163.1.S1_AT	adaptor-related protein complex 2, beta 1 subunit (AP2B1)
BT.26844.2.S1_AT	spindle and kinetochore associated complex subunit 3 (SKA3)
BT.5935.2.S1_A_AT	lysosomal protein transmembrane 4 alpha (LAPTM4A)
BT.6645.2.A1_AT	RNA binding region (RNP1, RRM) containing 3 (RNPC3)
BT.20359.1.S1_AT	IKAROS family zinc finger 3 (IKZF3)

				BT.10397.2.S1_AT	ring finger protein 20 (RNF20)
				BT.28515.1.A1_AT	casein kinase 1 gamma 3 (CSNK1G3)
				BT.4510.1.S1_AT	polyamine modulated factor 1 (PMF1)
GO:0043232	21	10.66	0.052	BT.26987.1.S1_AT	coilin (COIL)
Cellular Component: intracellular non-membrane-bounded organelle				BT.2846.1.A1_AT	ras homolog family member U (RHOU)
				BT.27320.1.A1_AT	shugoshin 2 (SGO2)
				BT.3125.1.S1_AT	tubulin tyrosine ligase like 1 (TTLL1)
				BT.12071.2.S1_AT	sirtuin 7 (SIRT7)
				BT.9506.1.S1_AT	M-phase phosphoprotein 8 (MPHOSPH8)
				BT.11489.2.A1_AT	histone cluster 1, H3e (HIST1H3E)
				BT.12768.1.S1_AT	phosphoenolpyruvate carboxykinase 1 (PCK1)
				BT.29910.1.S1_AT	sarcoglycan epsilon (SGCE)
				BT.1054.1.S1_AT	Rho/Rac guanine nucleotide exchange factor 18 (ARHGEF18)
				BT.26844.2.S1_AT	spindle and kinetochore associated complex subunit 3 (SKA3)
				BT.17939.1.S1_AT	lamin B1 (LMNB1)
				BT.6795.1.S1_AT	actin related protein 2/3 complex subunit 3 (ARPC3)
				BT.12561.1.S1_AT	ras homolog family member F, filopodia associated (RHOF)
				BT.2825.1.S1_AT	mitochondrial ribosomal protein L13 (MRPL13)
				BT.13391.1.S1_AT	capping actin protein of muscle Z-line alpha subunit 2 (CAPZA2)
				BT.10397.2.S1_AT	ring finger protein 20 (RNF20)
				BT.12770.1.A1_AT	synuclein alpha (SNCA)
				BT.18623.1.A1_AT	microtubule associated protein RP/EB family member 2 (MAPRE2)
				BT.4510.1.S1_AT	polyamine modulated factor 1 (PMF1)
				BT.1430.1.S1_AT	prefoldin subunit 5 (PFDN5)
GO:0043228	21	10.66	0.052	BT.26987.1.S1_AT	coilin (COIL)

Cellular Component:

non-membrane-bounded organelle

BT.2846.1.A1_AT	ras homolog family member U (RHOU)
BT.27320.1.A1_AT	shugoshin 2(SGO2)
BT.3125.1.S1_AT	tubulin tyrosine ligase like 1 (TTLL1)
BT.12071.2.S1_AT	sirtuin 7(SIRT7)
BT.9506.1.S1_AT	M-phase phosphoprotein 8 (MPHOSPH8)
BT.11489.2.A1_AT	histone cluster 1, H3e (HIST1H3E)
BT.12768.1.S1_AT	phosphoenolpyruvate carboxykinase 1 (PCK1)
BT.29910.1.S1_AT	sarcoglycan epsilon (SGCE)
BT.1054.1.S1_AT	Rho/Rac guanine nucleotide exchange factor 18 (ARHGEF18)
BT.26844.2.S1_AT	spindle and kinetochore associated complex subunit 3 (SKA3)
BT.17939.1.S1_AT	lamin B1 (LMNB1)
BT.6795.1.S1_AT	actin related protein 2/3 complex subunit 3 (ARPC3)
BT.12561.1.S1_AT	ras homolog family member F, filopodia associated (RHOF)
BT.2825.1.S1_AT	mitochondrial ribosomal protein L13 (MRPL13)
BT.13391.1.S1_AT	capping actin protein of muscle Z-line alpha subunit 2 (CAPZA2)
BT.10397.2.S1_AT	ring finger protein 20 (RNF20)
BT.12770.1.A1_AT	synuclein alpha (SNCA)
BT.18623.1.A1_AT	microtubule associated protein RP/EB family member 2 (MAPRE2)
BT.4510.1.S1_AT	polyamine modulated factor 1 (PMF1)
BT.1430.1.S1_AT	prefoldin subunit 5 (PFDN5)
