

Table S7: Classification of Protein-Coding Transcripts Altered in WTβ3 and/ or CAβ3 cells.

Downregulated transcripts are in red and upregulated transcripts are in black. Those transcripts that were either downregulated or upregulated in both cell lines are in bold. KEGG, DAVID Bioinformatics Resources, the Matrisome database and UniProt were used to classify the transcripts. The Miscellaneous Bio-annotation includes proteins that currently have no classification.

Bio-annotation	# of Genes	Genes in WTβ3 Cells	# of Genes	Genes in CAβ3 Cells
Enzymes (includes protein kinases and glycosyltransferases)	30	<b>PLCB1; CHAC1; MMP1;</b> <b>HERC5; GALNT14; TIE1;</b> <b>PTPRN; CYP1B1</b> <b>QPRT; HUNK; CPA4; DTX1;</b> <b>GALNT18; HS3ST3B1; GALC;</b> <b>SMARCA2; ADCY1;</b> <b>GUCY1A1; RIMKLA; RET;</b> <b>SULF2; B3GALNT1; ENPP4;</b> <b>CA9; PTGIS; CPS1; ATP8A2;</b> <b>QPCT; GALNT14</b>	69	<b>PLCB1; CHAC1; MMP1;</b> PTGES; TENT5B; EYA2; PLEK2; ARHGAP24; SGIP1; TNFAIP3; CHST7; CHST6; PTPRO; ST6GALNAC5; MME; FA2H; DUSP5; SIK1; PDF; PCSK1; NUDT4B; EYA2; SPOCD1; PGBD5 QPRT; HUNK; SULF2; CPA4; DTX1; GALNT18; HS3ST3B1; GALC; SMARCA2; ADCY1; GUCY1A1; RIMKLA; RET; TLL1; USP51; DIO2; ABCB1; OAS2; NUDT11; PDE3A; KATNAL2; KYNU; DHRS2; EGLN3; CA4; DDO; ACADS; GUCY1A2; FGFR2; HPD; KSR2; CMPK2; OAS1; DTX4; SULF1; PRSS12; PTP4A3; PDE5A; CHDH; PDE8B; FGFR3; HR; CFI; ABAT; MEST
Membrane trafficking	13	<b>PLCB1; HCLS1; CCN3</b> <b>MCF2L; LINGO1; GIPC3;</b> <b>ITGB3; GAS7; RAPGEF4;</b> <b>A2M; TBC1D8B; SH3GL2;</b> <b>ADGRB1</b>	27	<b>PLCB1; HCLS1; CCN3; SYTL3; RAB27B;</b> <b>PLEK2; SGIP1; NRP2; ARHGAP24; MSLN</b> <b>RAPGEF4; GIPC3; A2M; MCF2L; LINGO1;</b> <b>ITGB3; GAS7; SYT13; SRGAP3; DENND2D;</b> <b>ARHGAP22; DENND2C; DOC2B; AGAP2;</b> <b>EXPH5; SYT1</b>
Transcription (includes transcription factors, nuclear receptors and	19	<b>KLF4; DDIT3; TBX18;</b> <b>ZNF704; EBF1; EGR2;</b> <b>RUNX1T1; NUPR1</b> <b>ZNF677; ZC4H2; LMX1B;</b> <b>NPAS3; AR; ZNF793; ZNF69;</b>	57	<b>KLF4; DDIT3; TBX18; ZNF704; FOSL1;</b> <b>SP140; MAFF; KLF2; BNC1; RELB; RFX8;</b> <b>EYA2; SPOCD1; LPXN</b> <b>ZNF677; ZC4H2; LMX1B; NPAS3; ZNF793;</b> <b>ZNF69; ZNF117; AR; SMARCA2; MNX1;</b>

transcription machinery)		ZNF117; SMARCA2; MNX1; ZNF626		EBF1; ISL1; SOX5; HOXC9; STAT5A; LHX1; PAX6; ALX4; LHX2; EBF4; DMRTA1; HOXA13; ZIC5; DLX4; FOXS1; ZNF347; ZNF429; ZNF730; ZNF641; MYCL; TXNIP; MYOCD; ZNF467; ZNF391; ZNF667; RASL11A; PPARGC1A; USP51; RNASEL; EID3; RGMA; HR; ATF7;
Peptidases and inhibitors	11	ABHD8; MMP1; TIMP3 A2M; C4B; CPA4; PCSK1N; CPS1; QPCT; ADGRB1; SERPINB9	19	ABHD8; MMP1; TIMP3; TNFAIP3; MME; SERPINE1; BIRC3; PCSK1 A2M; C4B; CPA4; PCSK1N; TLL1; USP51; C4A; PRSS12; ADGRL3; CFI; CPAMD8
Exosome	10	TCIRG1; ACTG2 ITGB3; C4B; A2M; SLC44A4; PLP1; TUBA4A; TC2N; CETP	19	PARVB; MBP; MME; RAB27B; SERPINE1; ANXA3; LPXN ITGB3; C4B; A2M; ABCB1; MARVELD2; CA4; C4A; HPD; EFN1; IFITM1; CFI; CRYAB
Cell adhesion molecules	14	NRCAM; CDH11; PCDH20; JAM2 PCDHB13; PCDHB16; ITGB3; PCDHB5; PCDHB12; PODXL2 PCDHB10; PCDHGB3; PCDHGB1; TENM4	28	NRCAM; MSLN; CNTN3; VCAM1; PCDHGA6 PCDHB13; PCDHB16; ITGB3; PCDHB5; PCDHB12; PODXL2; PCDHB10; DCHS1; PCDH1; PCDHB11; IGDCC4; PCDH18; CDH6; PCDHB14; NCAM2; SNED1; ADGRL3; EFN1; TRO; CD33; MARVELD2; FLRT3; LRFN5;
Cytoskeleton associated proteins	10	HCLS1; MYH15; ACTG2; MAP7 KIAA1211L (CRACD) GAS7; LRRC6; NHS; TUBA4A; ADAP2	16	HCLS1; MYH15; PARVB; VILL; MYBPH; LPXN GAS7; LRRC6; ANK3; TMSB15A; KATNAL2; INA; IQGAP2; SORBS1; ABLIM1; RFLNA
Extracellular Matrix Associated Proteins <sup>1</sup>	15	MFAP2; MMP1; TNC; TIMP3 COL11A1; TIE1 VSTM2L; SULF2; A2M; SRPX; POSTN; EMILIN1; COL8A2; SERPINB9; SEMA5B;	29	MFAP2; MMP1; TNC; TIMP3; VEGFA; BMPER; SERPINE1; WNT7B; TNFAIP6; COL13A1; GREM1 VSTM2L; SULF2; A2M; SRPX; SEMA6D; MFAP4; FREM2; KAZALD1; SEMA6A;

				SEMA3D; TLL1; COL14A1; VWA5A; WNT8B; SULF1; ANGPT1; EMILIN3; SPOCK1
G-protein coupled receptors	6	CMKLR1; OPRD1; GPR1 GPRC5C; GLP2R; ADGRB1;	10	CMKLR1; HTR7 GPRC5C; GLP2R; SSTR2; S1PR5; ADRA2C; ADGRL3; ACKR1; GPR156;
Chromosome and associated proteins	6	AUTS2; PPP2R2C; SMARCA2; H4C6 (HIST1H4F); TUBA4A; SPAG4	14	H2BC6 (HIST1H2BE); PGBD5 AUTS2; PPP2R2C; SMARCA2; H4C6 (HIST1H4F); TSPYL5; USP51; SYCE2; DCDC2; PPP2R2B; HR; USH1G; H1- 1(HIST1H1A)
Cytokine Interactions	7	GDF15; IL18; CD70; TNFSF9; GDNF TRIL; BMP3	22	GDF15; IL18; CD70; CSF3; INHBB; VEGFA; IL1B; IL11; LIF; CXCL1; CXCL2; CXCL3; CXCL5; CXCL8; TNFAIP3 TRIL; BMP3; ANGPT1; BMP4; TGFB2; EFNB1; TRAF3IP3
CD molecules	6	CD70; EVI2A; JAM2; IL21R ITGB3; CDCP1	17	CD70; EVI2A; KLRC2; MME; CD274; CDCP1; EVI2B; VCAM1 ITGB3; CD33; ABCB1; BST2; FGFR2; FGFR3; IFITM1; ACKR1; NGFR
Transporters	8	ABCA8; C3orf18 (SLC35F6); PENK SLC22A17; CETP; SLC7A8; SLC44A4; RBP7	17	ABCA8; C3orf18 (SLC35F6); PENK; MFSD2A SLC22A17; CNNM1; ABCB1; SLC7A14; TMEM63C; NKAIN1; SLCO5A1; SLC8A2; SLC29A3; IFITM1; ATCAY; SLC19A3; REEP1
Ubiquitin system	4	TRIM6; HERC5 DTX1; KLHL13	11	TRIM6; BIRC3; KCTD14; TNFAIP3; TRIML2 DTX1; KLHL13; USP51; DTX4; KBTBD11; ARRDC4
Protein phosphatases and associated proteins	3	PCDH20; PTPRN PPP2R2C	11	PTPRO; SPOCD1; PPP4R4; DUSP5; EYA2; SYTL3 PPP2R2C; SLC7A14; PCDH1; PTP4A3; PPP2R2B
Ion channels	5	KCNS3	15	GRIN2A; KCNH2; TCAF2; FAM155B; ANO1; ANO4; CACNA2D2; P2RX7; KCNT2;

		GRIN2A; KCNH2; TCAF2; FAM155B		KCNJ8; CHRNA2; SCN9A; CHRNA3; ITPR2; TSPAN13
Glycosaminoglycan binding proteins	2	TNC; COL11A1	13	TNC; IL1B; VEGFA; CXCL8; WNT7B; COL13A1; SERPINE1; TNFAIP6 SLC8A2; FGFR2; BMP4; TGFB2; SLIT3
mRNA biogenesis	2	PPP2R2C; TUBA4A	5	TENT5B; GSPT2; MBP PPP2R2C; PPP2R2B
GTP-binding proteins	7	RAB36; PLEKHG4 RAPGEF4; MCF2L; DIRAS3; RND2; ADAP2	9	RHOD; RAB27B; ARHGAP24 (FILGAP) RAPGEF4; MCF2L; IQGAP2; RUND3A; SRGAP3; ARHGAP22
Cytochrome p450	2	CYP1B1; PTGIS	0	
Mitochondrial biogenesis	2	GDAP1L1; CHCHD10	2	GDAP1L1; PPARGC1A
Cytokine receptors	3	CMKLR1; IL21R GHR	5	CMKLR1; IL31RA GHR; ACKR1; NGFR
Chaperones and folding catalysts	0		4	DNAJB9; PCSK1 DNAJC12; CRYAB
Spliceosome	0		3	RNVU1-7 NOVA2; SRSF8
DNA repair and recombination proteins	0		2	PPP4R4 LRATD2 (FAM84B)
Ribosome biogenesis	1	ATP8A2	0	
Translation factors	0		1	GSPT2
Miscellaneous	26	IGFN1; MCTP1; PRTFDC1; SDF2L1; FCRLA; HCLS1; CRYBG1; ZNF804A; TMEM255A; CHCHD10; LRR17; SPX; NIPSNAP1; MID1IP1	68	IGFN1; MCTP1; PRTFDC1; SDF2L1; FCRLA; HCLS1; LURAP1L; FAM167A; NUP50-DT; TMEM158; ARMCX2; TM4SF19; SBSN; ANKRD29; SH2D5; HPCAL1; TEX15; NPY; DTNA; SCG2; PRUNE2; EMP1; PAQR5; KDELC2; FCRLB; GCSAM; DKK1; S100A6; DNER; PHLDA2

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**CCDC181; H3BM21**  
**(AC068234.1); TMEM98;**  
**BEND4; PAIP2B; VANGL2;**  
PLAC8; CARD11; NMU

**CCDC181; H3BM21 (AC068234.1); TMEM98;**  
**BEND4; PAIP2B; VANGL2;** FAM49A;  
LYPD6B; FAM13C; FAM225A; ZNF608;  
ARMH4; TMEM130; AMOT; SAMD11;  
ENDOD1; NPR3; ZNF66; CASC10; CASC15;  
LAMP5; SELENOP; TSPAN11; DMKN;  
APOC1; OLFM1; SNCAIP; SLITRK6; DLL1;  
C4BPA; SMAD6; MAGEH1; PKIB; LIN7A;  
TOX; SAMD5; HHIPL2; EFHD1

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