

**Table S1. Top functional annotation categories of genes upregulated by carboplatin.**

Functional category	Number of genes	P value*	Genes
mitochondrion	111	0.002	ALDH1B1, CAV1, L2HGDH, GRPEL1, C8orf38, C9orf46, PRODH, TAZ, ATP5O, VDACC2, DCAKD, MTCP1NB, MRPS6, NDUFC1, MRPS35, MRPL40, GLOD4, MPV17, GPX1, PAX9, BCL2L1, IARS2, ACAT1, TYMS, CRLS1, PTPMT1, FKBP8, MECR, DDIT4, AATK, RFK, AGXT2L2, SLC25A37, BAK1, SFXN4, NDUFAF3, GOT2, UNG, C1orf151, FAM82A2, IDH1, PMAIP1, RHOT2, MRPS36, ABCD3, SLC25A20, METTL12, DLD, MRPS15, MRPL10, PISD, PROSC, MCL1, ACOT8, AUH, CLTC, COX8A, IREB2, SLC25A46, ATP5L, AIFM2, PRKACA, C17orf89, SNN, BBC3, SQRD, RILP, BNIP3L, MRPL38, IDI1, ECSIT, SPATA18, UXS1, SDSL, POLRMT, GTPBP3, NUDT8, NDUFA8, XRCC3, ETHE1, DNLZ, BRI3BP, GLS2, RAB35, MTG1, SLC25A17, ABCB6, BRP44L, JTB, NLRX1, ECH1, GRAMD4, YRDC, ME1, HAX1, FTSJ2, SCO1, TIMM13, VPS25, NOP14, AFG3L2, NDUFA3, PSMA6, SLC22A4, MYCBP, MRP63, ATP5I, ZBTB9, FXN, FDXR, KIAA0141
apoptotic process	48	0.033	CYFIP2, PHLDA1, IER3, ZMAT3, PSMB4, SGMS1, CCAR1, CLSPN, PPP1R15A, HTT, PLK3, BCL2L1, ARHGEF7, MFSD10, FKBP8, RNF41, DDIT4, AATK, MDM4, BAK1, PHLDA3, DRAM1, EGLN3, SGPP1, MKNK2, FAM82A2, PMAIP1, RHOT2, MCL1, AEN, NTN1, BBC3, ECE1, LGALS7B, GADD45A, EPHA2, ITM2B, AXIN1, TNFRSF12A, TNFRSF10B, GRAMD4, PSMD11, PSMB10, TGFB2, PSMA6, TNFRSF10D, PAK6, KIAA0141

\*hypergeometric P value corrected for multiple testing

**Table S2. Top functional annotation categories of genes downregulated by carboplatin.**

Functional category	Number of genes	P value*	Genes
cell division	25	0.00004	CENPF, ANXA11, FBXO5, PDS5B, PTTG1, OIP5, NCAPH, LMLN, PHF13, HAUS5, POGZ, UBE2C, NCAPD2, KIAA1009, ASPM, CDC20, BUB3, CCNB2, BUB1, CIT, KIF20B, CEP55, CKS2, SPAG5, CCNA2
cell cycle	32	0.00008	UHRF1, CDKN1B, ANXA11, CHAF1A, RAB11B, RPS6KA3, GAS1, PDS5B, OIP5, CDKN3, MAP3K8, NCAPH, LMLN, HAUS5, LIN9, POGZ, GSG2, PRC1, UBE2C, NCAPD2, KIAA1009, MELK, E2F8, ARL3, ASPM, CDC20, CIT, KIF20B, CEP55, CKS2, C15orf42, SPAG5
DNA replication	17	0.00036	CENPF, POLQ, CHAF1A, POLD3, RFC3, POLA1, POLE2, TK1, BLM, MCM9, LIN9, GINS2, DUT, RMI1, TOP2A, GINS3, C15orf42

\*hypergeometric P value corrected for multiple testing

**Table S3. Functional annotation of genes upregulated by decitabine and carboplatin (DAC+Carbo).**

Functional category	Number of genes	P value*	Genes
cell adhesion	6	0.00423	HES5, IGFBP7, PSTPIP1, MYBPC3, THBS1, COL5A1
apoptotic process	5	0.04282	TNFRSF10C, PLEKHF1, PREX1, PDIA2, NGFRAP1
integrin signalling	3	0.00015	COL9A2, COL5A1, COL8A2

\*hypergeometric P value corrected for multiple testing