

Supplemental Table S4: Hypoxia, glycolysis and Akt pathway gene signatures

Hypoxia Pathway	Glycolysis Pathway	AKT Pathway
ADM	ABCB6	ACACA
ADORA2B	ADORA2B	ACTR2
AK4	AGL	ACTR3
AKAP12	AGRN	ADCY2
ALDOA	AK3	ADRBK1
ALDOB	AK4	AKT1
ALDOC	AKR1A1	AKT1S1
AMPD3	ALDH7A1	AP2M1
ANGPTL4	ALDH9A1	ARF1
ANKZF1	ALDOA	ARHGDI4
ANXA2	ALDOB	ARPC3
ATF3	ALG1	ATF1
ATP7A	ANG	CAB39
B3GALT6	ANGPTL4	CAB39L
B4GALNT2	ANKZF1	CALR
BCAN	ARPP19	CAMK4
BCL2	ARTN	CDK1
BGN	AURKA	CDK2
BHLHE40	B3GALT6	CDK4
BNIP3L	B3GAT1	CDKN1A
BRS3	B3GAT3	CDKN1B
BTG1	B3GNT3	CFL1
CA12	B4GALT1	CLTC
CASP6	B4GALT2	CSNK2B
CAV1	B4GALT4	CXCR4
CCNG2	B4GALT7	DAPP1
CCRN4L	BIK	DDIT3
CDKN1A	BPNT1	DUSP3
CDKN1B	CACNA1H	E2F1
CDKN1C	CAPN5	ECSIT
CHST2	CASP6	EGFR
CHST3	CD44	EIF4E
CITED2	CDK1	FASLG
COL5A1	CENPA	FGF17
CP	CHPF	FGF22
CSR2P2	CHPF2	FGF6
CTGF	CHST1	GNA14
CXCR4	CHST12	GNGT1
CXCR7	CHST2	GRB2
CYR61	CHST4	GSK3B
DCN	CHST6	HRAS
DDIT3	CITED2	HSP90B1
DDIT4	CLDN3	IL2RG

DPYSL4	CLDN9	IL4
DTNA	CLN6	IRAK4
DUSP1	COG2	ITPR2
EDN2	COL5A1	LCK
EFNA1	COPB2	MAP2K3
EFNA3	CTH	MAP2K6
EGFR	CXCR4	MAP3K7
ENO1	CYB5A	MAPK1
ENO2	DCN	MAPK10
ENO3	DDIT4	MAPK8
ERO1L	DEPDC1	MAPK9
ERRFI1	DLD	MAPKAP1
ETS1	DPYSL4	MKNK1
EXT1	DSC2	MKNK2
F3	ECD	MYD88
FAM162A	EFNA3	NCK1
FBP1	EGFR	NFKBIB
FOS	EGLN3	NGF
FOSL2	ELF3	NOD1
FOXO3	ENO1	PAK4
GAA	ENO2	PDK1
GALK1	ERO1L	PFN1
GAPDH	EXT1	PIK3R3
GAPDHS	EXT2	PIKFYVE
GBE1	FAM162A	PIN1
GCK	FBP2	PITX2
GCNT2	FKBP4	PLA2G12A
GLRX	FUT8	PLCB1
GPC1	G6PD	PLCG1
GPC3	GAL3ST1	PPP1CA
GPC4	GALE	PPP2R1B
GPI	GALK1	PRKAA2
GRHPR	GALK2	PRKAG1
GYS1	GAPDHS	PRKAR2A
HAS1	GCLC	PRKCB
HDLBP	GFPT1	PTEN
HEXA	GLCE	PTPN11
HK1	GLRX	RAC1
HK2	GMPPA	RAF1
HMOX1	GMPPB	RALB
HOXB9	GNE	RIPK1
HS3ST1	GNPDA1	RIT1
HSPA5	GOT1	RPS6KA1
IDS	GOT2	RPS6KA3
IER3	GPC1	RPTOR

IGFBP1	GPC3	SFN
IGFBP3	GPC4	SLA
IL6	GPR87	SLC2A1
ILVBL	GUSB	SMAD2
INHA	GYS1	SQSTM1
IRS2	GYS2	STAT2
ISG20	HAX1	TBK1
JMJD6	HDLBP	THEM4
JUN	HK2	TIAM1
KDELR3	HMMR	TNFRSF1A
KDM3A	HOMER1	TRAF2
KIF5A	HS2ST1	TRIB3
KLF6	HS6ST2	TSC2
KLF7	HSPA5	UBE2D3
KLHL24	IDH1	UBE2N
LALBA	IDUA	VAV3
LARGE	IER3	YWHAB
LDHA	IGFBP3	
LDHC	IL13RA1	
LOX	IRS2	
LXN	ISG20	
MAFF	KDELR3	
MAP3K1	KIF20A	
MIF	KIF2A	
MT1E	LCT	
MT2A	LDHA	
MXI1	LDHC	
MYH9	LHPP	
NAGK	LHX9	
NCAN	MDH1	
NDRG1	MDH2	
NDST1	ME1	
NDST2	ME2	
NEDD4L	MED24	
NFIL3	MERTK	
NR3C1	MET	
P4HA1	MIF	
P4HA2	MIOX	
PAM	MPI	
PCK1	MXI1	
PDGFB	NANP	
PDK1	NASP	
PDK3	NDST3	
PFKFB3	NDUFV3	
PFKL	NOL3	

PFKP	NSDHL
PGAM2	NT5E
PGF	P4HA1
PGK1	P4HA2
PGM1	PAM
PGM2	PAXIP1
PHKG1	PC
PIM1	PDK3
PKLR	PFKFB1
PKP1	PFKP
PLAC8	PGAM1
PLAUR	PGAM2
PLIN2	PGK1
PNRC1	PGLS
PPARGC1A	PGM2
PPFIA4	PHKA2
PPP1R15A	PKM2
PPP1R3C	PKP2
PRDX5	PLOD1
PRKCA	PLOD2
PRKCDBP	PMM2
PTRF	POLR3K
PYGM	PPFIA4
RBPJ	PPIA
RORA	PPP2CB
RRAGD	PRPS1
S100A4	PSMC4
SAP30	PYGB
SCARB1	PYGL
SDC2	QSOX1
SDC3	RARS
SDC4	RBCK1
SELENBP1	RPE
SERPINE1	RRAGD
SIAH2	SAP30
SLC25A1	SDC1
SLC2A1	SDC2
SLC2A3	SDC3
SLC2A5	SDHC
SLC37A4	SLC16A3
SLC6A6	SLC25A10
SRPX	SLC25A13
STBD1	SLC35A3
STC1	SLC37A4
STC2	SOD1

SULT2B1	SOX9
TES	SPAG4
TGFB3	SRD5A3
TGFBI	STC1
TGM2	STC2
TIPARP	STMN1
TKTL1	TALDO1
TMEM45A	TFF3
TNFAIP3	TGFA
TPBG	TGFBI
TPD52	TKTL1
TPI1	TPBG
TPST2	TPI1
UGP2	TPST1
VEGFA	TSTA3
VHL	TXN
VLDLR	UGP2
WISP2	VCAN
WSB1	VEGFA
XPNPEP1	VLDLR
ZFP36	XYLT2
ZNF292	ZNF292