

Suppl. Table 1. Top 20 genes up-regulated in MDA231 MRCK α KO cells

Symbol	Log2 FC	Protein name
TLL2	4.58	tolloid like 2
FAM221B	3.53	family with sequence similarity 221 member B
LYPD6B	3.40	LY6/PLAUR domain containing 6B
LOC101927262	3.28	melanoma-associated antigen C1-like
UNC5B	3.17	unc-5 netrin receptor B
AADAC	3.09	arylacetamide deacetylase
SIX3	2.93	SIX homeobox 3
MTAP	2.86	methylthioadenosine phosphorylase
LTB	2.83	lymphotoxin beta
TEX19	2.81	testis expressed 19
NOD2	2.68	nucleotide binding oligomerization domain containing 2
ZNF396	2.61	zinc finger protein 396
SPATA31D4	2.58	SPATA31 subfamily D member 4
SPOCK2	2.58	SPARC/osteonectin, cwcv and kazal like domains proteoglycan 2
TNR	2.58	tenascin R
SLC25A18	2.43	solute carrier family 25 member 18
ENTHD1	2.39	ENTH domain containing 1
CCL17	2.32	C-C motif chemokine ligand 17
GSX2	2.32	GS homeobox 2
MAFA	2.32	MAF bZIP transcription factor A

Suppl. Table 2. Top 20 genes down-regulated in MDA231 MRCK α KO cells

Symbol	Log2 FC	Protein name
TEX101	-4.66	testis expressed 101
PRR23C	-3.54	proline rich 23C
CASP14	-3.52	caspase 14
PKNOX2	-3.46	PBX/knotted 1 homeobox 2
SSX5	-3.16	SSX family member 5
OXCT2	-3.07	3-oxoacid CoA-transferase 2
GOLGA8H	-3.01	golgin A8 family member H
ADARB2	-3.00	adenosine deaminase, RNA specific B2 (inactive)
LOC107987477	-2.96	uncharacterized LOC107987477
NTSR1	-2.91	neurotensin receptor 1
FANCD2P2	-2.89	Fanconi anemia complementation group D2 pseudogene 2
RIMBP3B	-2.86	RIMS binding protein 3B
FNTB	-2.77	farnesyltransferase, CAAX box, beta
ACTG2	-2.77	actin, gamma 2, smooth muscle, enteric
LRRC15	-2.75	leucine rich repeat containing 15
ACOT11	-2.72	acyl-CoA thioesterase 11
PYY	-2.71	peptide YY
ADGRF4	-2.70	adhesion G protein-coupled receptor F4
LOC107987253	-2.58	uncharacterized protein FAM215A-like
LOC107987254	-2.58	uncharacterized protein FAM215A-like

Suppl. Table 3. Top 20 genes up-regulated in MDA231 MRCK β KO cells

Symbol	Log2 FC	Protein name
LMOD1	3.70	leiomodin 1
TLL2	3.46	tolloid like 2
SLFN11	2.81	schlafen family member 11
LOC107984156	2.75	ADP-ribosylation factor-like protein 17
SYT7	2.58	synaptotagmin 7
COL11A2	2.58	collagen type XI alpha 2 chain
FAM221B	2.55	family with sequence similarity 221 member B
ZNF382	2.53	zinc finger protein 382
LTB	2.50	lymphotoxin beta
AADAC	2.46	arylacetamide deacetylase
NIPSNAP3B	2.46	nipsnap homolog 3B
DENND6B	2.32	DENN domain containing 6B
FAM167B	2.32	family with sequence similarity 167 member B
BTBD8	2.31	BTB domain containing 8
SKAP1	2.31	src kinase associated phosphoprotein 1
INSC	2.28	inscuteable homolog (Drosophila)
TRPM2	2.24	transient receptor potential cation channel subfamily M member 2
AGT	2.18	angiotensinogen
PPP1R32	2.14	protein phosphatase 1 regulatory subunit 32
PIK3IP1	2.12	phosphoinositide-3-kinase interacting protein 1

Suppl. Table 4. Top 20 genes down-regulated in MDA231 MRCK β KO cells

Symbol	Log2 FC	Protein name
SSX5	-3.30	SSX family member 5
CYBB	-3.21	cytochrome b-245 beta chain
NR5A2	-3.04	nuclear receptor subfamily 5 group A member 2
CTSW	-2.97	cathepsin W
PRY	-2.91	PTPN13-like, Y-linked
TMEM233	-2.84	transmembrane protein 233
UPK1B	-2.83	uroplakin 1B
C9orf66	-2.75	chromosome 9 open reading frame 66
EME2	-2.75	essential meiotic structure-specific endonuclease subunit 2
ADGRF4	-2.70	adhesion G protein-coupled receptor F4
LOC105379282	-2.70	glucose-dependent insulinotropic receptor-like
LOC100130357	-2.70	uncharacterized LOC100130357
IL10	-2.62	interleukin 10
PROCA1	-2.60	protein interacting with cyclin A1
SMKR1	-2.60	small lysine rich protein 1
GLIPR1L1	-2.56	GLI pathogenesis related 1 like 1
PIANP	-2.54	PILR alpha associated neural protein
TRIM17	-2.54	tripartite motif containing 17
BTC	-2.50	betacellulin
RNF43	-2.50	ring finger protein 43

Suppl. Table 5. Top 20 genes up-regulated in MDA231 DKO cells

Symbol	Log2 FC	Protein name
LTB	3.63	lymphotoxin beta
FAM221B	2.97	family with sequence similarity 221 member B
EGR1	2.49	early growth response 1
SYT7	2.35	synaptotagmin 7
ARC	2.30	activity regulated cytoskeleton associated protein
ALOXE3	2.11	arachidonate lipoxygenase 3
NIPSNAP3B	2.09	nipsnap homolog 3B
SLC12A5	2.09	solute carrier family 12 member 5
SLC25A18	2.07	solute carrier family 25 member 18
C5orf64	2.04	chromosome 5 open reading frame 64
CALCRL	2.00	calcitonin receptor like receptor
GCNT4	1.93	glucosaminyl (N-acetyl) transferase 4, core 2
LTF	1.90	lactotransferrin
TRPM2	1.90	transient receptor potential cation channel subfamily M member 2
CXCL11	1.81	C-X-C motif chemokine ligand 11
MUSTN1	1.75	musculoskeletal, embryonic nuclear protein 1
TNFAIP3	1.73	TNF alpha induced protein 3
TRPM6	1.72	transient receptor potential cation channel subfamily M member 6
DHRS2	1.70	dehydrogenase/reductase 2
CSF2RB	1.67	colony stimulating factor 2 receptor beta common subunit

Suppl. Table 6. Top 20 genes down-regulated in MDA231 DKO cells

Symbol	Log2 FC	Protein name
NR5A2	-2.72	nuclear receptor subfamily 5 group A member 2
PYY	-2.56	peptide YY
RUNDC3A	-2.32	RUN domain containing 3A
GNAT1	-2.28	G protein subunit alpha transducin 1
CRLF2	-2.15	cytokine receptor-like factor 2
GDPGP1	-2.13	GDP-D-glucose phosphorylase 1
C9orf66	-2.11	chromosome 9 open reading frame 66
GHR	-2.07	growth hormone receptor
KIAA2012	-1.95	KIAA2012
PRY	-1.91	PTPN13-like, Y-linked
PCSK6	-1.91	proprotein convertase subtilisin/kexin type 6
AMER3	-1.87	APC membrane recruitment protein 3
GNRH1	-1.83	gonadotropin releasing hormone 1
MYO15B	-1.78	myosin XVB
ZNF474	-1.77	zinc finger protein 474
TMEM37	-1.75	transmembrane protein 37
SSX5	-1.74	SSX family member 5
CRLF1	-1.68	cytokine receptor like factor 1
HLA-G	-1.64	major histocompatibility complex, class I, G
HIGD1B	-1.62	HIG1 hypoxia inducible domain family member 1B