

## Lentiviral knockdown vectors

### How to find your gene?

Search the gene name list for your gene of interest. If you are not sure about the gene name, take advantage of [www.ihop-net.org](http://www.ihop-net.org) to find it!

### What will you get?

For each gene target you will get up to 5 knockdown constructs in pLKO.1-puro (SIGMA),

### How to receive the plasmid DNA?

Send an E-mail request to [cord.brakebusch \(at\) bric.dk](mailto:cord.brakebusch@bric.dk).

Name	Gene name	Ensembl identification	Sigma name
	Akt1	OTTMUSG00000020941	thymoma viral proto-oncogene 1
Arfp2	ARFIP2	ENSCPOG00000006254	ADP-ribosylation factor interacting protein 2
Por1	Arfp2	ENSMUSG00000030881	Arfaptin-2 (ADP-ribosylation factor-interacting protein 2)
ARNT	Arnt	OTTMUSG00000016472	aryl hydrocarbon receptor nuclear translocator
Baiap2	BAIAP2	ENSCPOG00000000076	brain-specific angiogenesis inhibitor 1-associated protein 2
p53IRS	Baiap2	OTTMUSG0000004049	brain-specific angiogenesis inhibitor 1-associated protein 2
Cdc42	Cdc42	ENSCPOG00000005806	cell division cycle 42 homolog ( <i>S. cerevisiae</i> )
MRCKa	Cdc42bpA	OTTMUSG00000021765	Cdc42 binding protein kinase alpha
MRCKb	Cdc42BpB	ENSMUSG00000021279	Serine/threonine-protein kinase MRCK beta
Cdc42bpg	CDC42BPG	ENSCPOG00000008144	CDC42 binding protein kinase gamma (DMPK-like)
	Cdc42SE1	OTTMUSG00000022348	CDC42 small effector 1
	Cdc42SE2	OTTMUSG00000005677	CDC42 small effector 2
P21	Cdkn1a	ENSMUSG00000023067	cyclin-dependent kinase inhibitor 1A (P21)
p27	CDKN1B	ENSDNOG00000012478	cyclin-dependent kinase inhibitor 1B (P27)
p57	CDKN1C	ENSG00000129757	cyclin-dependent kinase inhibitor 1C (P57)
CDK2A	CDKN2A	ENSF00000003111	cyclin-dependent kinase inhibitor 2A
p15	CDKN2B	OTTHUMG00000019691	cyclin-dependent kinase inhibitor 2B (p15: inhibits CDK4)
P18	CDKN2C	OTTMUSG00000008484	cyclin-dependent kinase inhibitor 2C (p18: inhibits CDK4)
CDK3	CDKN3	ENSCPOG00000004203	cyclin-dependent kinase inhibitor 3
Cofilin1	Cfl1	ENSCPOG00000008063	cofilin 1: non-muscle
Citron	Cit	ENSCAFG00000010114	citron
	CXCL12	OTTMUSG00000022768	chemokine (C-X-C motif) ligand 12
	CXCL12 (human)	OTTHUMG00000018054	chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1)
	CXCR4	OTTMUSG00000020918	chemokine (C-X-C motif) receptor 4
	CXCR4 (human)	ENSG00000121966	C-X-C chemokine receptor type 4 (CXCR-4) (CXCR-4) (Stromal cell-derived factor 1 receptor) (SDF-1 receptor)
CybA(human)	CYBA (human)	ENSCPOG00000001019	cytochrome b-245: alpha polypeptide
Cyfp1	CYFIP1	ENSCPOG00000012722	cytoplasmic FMR1 interacting protein 1
cyfp2	CYFIP2	ENSCPOG00000008377	cytoplasmic FMR1 interacting protein 2
CYLD	CYLD	ENSCPOG00000010061	cylindromatosis (turban tumor syndrome)
Dgkq	Dgkq	ENSCPOG00000002313	diacylglycerol kinase: theta

Diap1	Diap1	ENSMUSG00000024456	diaphanous homolog 1 (Drosophila)
Diap2	Diap2	ENSMUSG00000034480	diaphanous homolog 2 (Drosophila)
Diap3	Diap3	ENSMUSG00000022021	diaphanous homolog 3 (Drosophila)
EGLN1	Egln1	ENSMUSG00000031987	Hypoxia-inducible factor prolyl hydroxylase 2
EGLN2	Egln2	OTTMUSG00000023172	EGL nine homolog 2
EGLN3	Egln3	ENSMUSG00000035105	Hypoxia-inducible factor prolyl hydroxylase 3
HIF-2alpha	Epas1	ENSMUSG00000024140	Hypoxia- inducible factor 2 alpha
	Ext1	OTTMUSG00000019491	exostoses (multiple) 1
	Ext2	OTTMUSG00000014564	exostoses (multiple) 2
PAR2	F2RL1	ENSCAFG00000009281	Proteinase-activated receptor 2 precursor (PAR-2) (Thrombin receptor- like 1) (Coagulation factor II receptor-like 1) (G-protein coupled receptor 11)
	Fhod1	OTTMUSG00000029936	formin homology 2 domain containing 1
	Fmnl1	OTTMUSG00000003031	formin-like 1
	Gsk3a	OTTMUSG00000021123	glycogen synthase kinase 3 alpha
	Gsk3b	OTTMUSG00000016276	glycogen synthase kinase 3 beta
HES-1	Hesx1	ENSMUSG00000040726	homeo box gene expressed in ES cells
HIF-1alpha	Hif1a	OTTMUSG00000019740	hypoxia inducible factor 1, alpha subunit
FIH1	Hif1an	ENSMUSG00000036450	Hypoxia-inducible factor 1 alpha inhibitor
HIF-3alpha	Hif3a	OTTMUSG00000022817	hypoxia inducible factor 3, alpha subunit
HIPK2	HIPK2	ENSMUSG00000061436	homeodomain interacting protein kinase 2
Ptplad1	Hspc121	ENSMUSG00000033629	Protein tyrosine phosphatase-like protein PTPLAD1
	Igf1r	ENSMUSG00000005533	Insulin-like growth factor 1 receptor precursor
IKKbeta	Ikkbb	ENSMUSG00000031537	Inhibitor of nuclear factor kappa-B kinase subunit beta
	IQGAP1	ENSMUSG00000030536	Ras GTPase-activating-like protein IQGAP1
	IQGAP2	ENSMUSG00000021676	Q motif containing GTPase activating protein 2
a11 integrin	Itga11	ENSMUSG00000032243	Integrin alpha-11 precursor
av integrin	Itgav	OTTMUSG00000013360	integrin alpha V
b1 integrin	Itgb1	ENSMUSG00000025809	Integrin beta-1 precursor
b3 integrin	Itgb3	OTTMUSG00000003177	integrin beta 3
b4 integrin	Itgb4	OTTMUSG00000003650	integrin beta 4
Itrp1	Itrp1	ENSCPOG00000005053	inositol 1:4:5-triphosphate receptor 1
Kcna2	Kcna2	ENSMUSG00000040724	potassium voltage-gated channel: shaker-related subfamily: member 2
Ktn1	Ktn1	ENSMUSG00000021843	kinectin 1
Limk1	Limk1	ENSMUSG00000029674	LIM-domain containing: protein kinase
Limk2	Limk2	ENSMUSG00000020451	LIM motif-containing protein kinase 2
LOC385049	LOC385049		similar to Rho-associated coiled-coil forming kinase 1
	Mal	OTTMUSG00000016065	myelin and lymphocyte protein, T-cell differentiation protein
Mlk2	Map3K10	OTTMUSG00000023963	mitogen activated protein kinase kinase kinase 10
Map3k11	MAP3K11	ENSCPOG00000014215	mitogen activated protein kinase kinase kinase 11
Mlk3	Map3K11	ENSMUSG00000004054	Mitogen-activated protein kinase kinase kinase 11
Mekk4	Map3K4	ENSMUSG00000014426	Mitogen-activated protein kinase kinase kinase 4
PRAK	MAPKAPK5	ENSCAFG00000008745	MAP kinase-activated protein kinase 5

	Mmp13	ENSMUSG00000050578	Matrix metalloproteinase-13
	Mmp14	ENSMUSG00000000957	Matrix metalloproteinase-14 precursor, Membrane-type matrix metalloproteinase 1 (MT-MMP 1)
Mylk2	Mylk2	OTTMUSG00000000690	myosin: light polypeptide kinase 2: skeletal muscle Organism
Nck1	NCK1	ENSMUSG00000032475	NCK adaptor protein 1
Nckap1	NCKAP1	ENSMUSG00000022488	NCK-associated protein 1
NFAT	Nfata1	ENSMUSG00000033016	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1
Nos2A(human)	NOS2A	OTTHUMG00000059253	nitric oxide synthase 2A (inducible: hepatocytes)
Notch1	Notch1	ENSMUSG00000026923	Notch gene homolog 1 (Drosophila)
Pak1	Pak1	ENSCAFG00000004956	p21 (CDKN1A)-activated kinase 1
Pak2	Pak2	ENSGACG00000010731	p21 (CDKN1A)-activated kinase 2
Pak3	Pak3	ENSCPOG00000000651	p21 (CDKN1A)-activated kinase 3
Pak4	Pak4	ENSBTAG00000013958	p21 (CDKN1A)-activated kinase 4
Pak6	Pak6	ENSTRUG00000004444	p21 (CDKN1A)-activated kinase 6
Pak7	Pak7	ENSRNOG00000005509	p21 (CDKN1A)-activated kinase 7
Par6 A	PAR6A	ENSCAFG00000020351	par-6 (partitioning defective 6): homolog alpha (C. elegans)
Par6 g	PAR6G	ENSCAFG00000000005	par-6 partitioning defective 6 homolog gamma (C. elegans)
PATCHED 1	PATHCHED1	ENSBTAG00000010731	cyclin-dependent kinase inhibitor 2D (p19: inhibits CDK4)
WT1	PAWAR	ENSCAFG00000005772	PRKC: apoptosis: WT1: regulator
PIK3R1	PIK3R1	ENSCAFG00000007626	phosphatidylinositol 3-kinase: regulatory subunit: polypeptide 1 (p85 alpha)
Pip5k1c	Pip5k1c	ENSCAFG00000019205	phosphatidylinositol-4-phosphate 5-kinase: type 1 gamma
aPKC i/1	Pkci	ENSMUSG00000037643	Protein kinase C iota type
Pkn1	Pkn1	ENSGACG00000019310	protein kinase N1
Pkn2	Pkn2	ENSCAFG00000020223	protein kinase N2
Plcb2	PLCB2	ENSCAFG00000009036	phospholipase C: beta 2
Plcg1	Plcg1	ENSCAFG00000009082	phospholipase C; gamma 1
Pld1	Pld1	ENSCAFG00000015246	phospholipase D1
Pld2	Pld2	ENSBTAG00000013392	phospholipase D2
Pld3	Pld3	ENSCAFG00000005362	phospholipase D family: member 3
Calcineurin	Ppp3r1	OTTMUSG00000005195	protein phosphatase 3, regulatory subunit B, alpha isoform (calcineurin B, type I)
Prkca	Prkca	ENSECAG00000006771	protein kinase C; alpha
Cox2	Ptgs2	ENSMUSG00000032487	Cyclooxygenase- 2
FAK	Ptk2	ENSMUSG00000022607	Focal adhesion kinase 1
Rac 1	Rac1	ENSCAFG00000015716	RAS-related C3 botulinum substrate 1
	Rac2	ENSMUSG00000033220	Ras-related C3 botulinum toxin substrate 2 precursor
	Rac3	OTTMUSG00000004093	RAS-related C3 botulinum substrate 3
CSL/RBP-J	Rbpsuh	ENSMUSG00000039191	recombining binding protein suppressor of hairless (Drosophila)
Calcipressin	Rcan1, Dscr1	ENSMUSG00000022951	Down syndrome critical region homolog 1 (human)
RelA	relA	ENSMUSG00000024927	Transcription factor p65 (Nuclear factor NF-kappa-B p65 subunit)
	RhoA	ENSMUSG00000007815	Transforming protein RhoA precursor
Rhob	Rhob	ENSXETG00000026772	ras homolog gene family: member B
	Rhobtb1	ENSMUSG00000019944	Rho-related BTB domain-containing protein 1

	Rhobtb2	ENSMUSG00000022075	Rho-related BTB domain-containing protein 2 (Deleted in breast cancer 2 gene protein homolog)
Rhoc	Rhoc	ENSEEUG00000011529	ras homolog gene family:member C
	RhoD	OTTMUSG00000028325	ras homolog gene family, member D
Rif	RhoF	ENSMUSG00000029449	Rho-related GTP-binding protein RhoF precursor
	RhoG	OTTMUSG00000022529	ras homolog gene family, member G
TCL	Rhoj	OTTMUSG00000027646	ras homolog gene family, member J
TC10	RhoQ	OTTMUSG00000024349	ras homolog gene family, member Q
Wrch1	RhoU	OTTMUSG00000027612	ras homolog gene family, member U
Wrch2	RhoV	OTTMUSG00000015878	ras homolog gene family, member V
Rhpn1	Rhpn1	ENSORLG00000013109	rhophilin: Rho GTPase binding protein 1
Rhpn2	Rhpn2	ENSCAFG00000007465	rhophilin:Rho GTPase binding protein 2
	Rnd1	OTTMUSG00000029005	Rho family GTPase 1
	Rnd2	OTTMUSG00000002875	Rho family GTPase 2
	Rnd3	OTTMUSG00000012429	Rho family GTPase 3
Rock1	Rock1	ENSF00000003571	Rho-associated coiled-coil containing protein kinase 1
Rock2	Rock2	ENSORLG00000012731	Rho-associated coiled-coil containing protein kinase 2
RP23-427P14.1	RP23-427P14.1	ENSCAFG00000001161	similar to myosin light chain kinase
p70S6K	Rps6kB1	OTTMUSG00000001198	ribosomal protein S6 kinase, polypeptide 1
	Smad2	ENSMUSG00000024563	Mothers against decapentaplegic homolog 2 (SMAD 2)
	Smad3	OTTMUSG00000021500	MAD homolog 3 (Drosophila)
	Smad4	OTTMUSG00000021090	MAD homolog 4 (Drosophila)
Smurf2	SMURF2	ENSCAFG00000011645	SMAD specific E3 ubiquitin protein ligase 2
SOS1	SOS1	ENSCAFG00000018916	suppressor of cytokine signaling 1
SOS2	SOS2	ENSBTAG00000012007	suppressor of cytokine signaling 2
	Sp1	ENSMUSG00000001280	Transcription factor Sp1
	SRF	ENSMUSG00000015605	Serum response factor (SRF)
Ssh1	Ssh1	ENSF00000002478	slingshot homolog 1 (Drosophila)
	Ssp1 (hu)	ENSG00000112701	Sentrin-specific protease 6
	Stat3	OTTMUSG00000002128	signal transducer and activator of transcription 3
Synj2	SYNJ2	ENSBTAG00000007586	synaptojanin 2
TANGO	TANGO	ENSCAFG00000013601	melanoma inhibitory activity 3
Ack	Tnk2	OTTMUSG00000026940	tyrosine kinase, non-receptor, 2
TubA1	TUBA1A	ENSCAFG00000008661	tubulin: alpha 1
VHL	Vhlh	OTTMUSG00000024147	von Hippel-Lindau syndrome homolog
Was	WAS	ENSMUSG00000031165	Wiskott-Aldrich syndrome homolog (human)