

Table S1. Differentially expressed genes between VILI-exposed WT and VILI-exposed nmMLCK KO mice

Gene symbol	Gene title	FC ^a	FDR
<i>2900097C17Rik</i>	RIKEN cDNA 2900097C17 gene	0.17	0.051
<i>Arntl</i>	aryl hydrocarbon receptor nuclear translocator-like	0.18	< 0.001
<i>Ptplad1</i>	protein tyrosine phosphatase-like A domain containing 1	0.19	0.051
<i>Upk1b</i>	uroplakin 1B	0.19	< 0.001
<i>5430404G13Rik</i>	RIKEN cDNA 5430404G13 gene	0.19	< 0.001
<i>5330426P16Rik</i>	RIKEN cDNA 5330426P16 gene	0.22	< 0.001
<i>Cxcl5</i>	chemokine (C-X-C motif) ligand 5	0.22	< 0.001
<i>Rab27a</i>	RAB27A, member RAS oncogene family	0.23	< 0.001
<i>Gja1</i>	gap junction protein, alpha 1	0.23	0.051
<i>S1pr3</i>	sphingosine-1-phosphate receptor 3	0.23	0.051
<i>Cyth1</i>	cytohesin 1	0.23	< 0.001
<i>Il6st</i>	interleukin 6 signal transducer	0.24	0.051
<i>Cxcl2</i>	chemokine (C-X-C motif) ligand 2	0.24	0.051
<i>AI848100</i>	expressed sequence AI848100	0.24	< 0.001
<i>Mbtps1</i>	membrane-bound transcription factor peptidase, site 1	0.24	0.051
<i>C330007P06Rik</i>	RIKEN cDNA C330007P06 gene	0.24	< 0.001
<i>Stom</i>	stomatin	0.24	< 0.001
<i>Arl15</i>	ADP-ribosylation factor-like 15	0.26	< 0.001
<i>Fbxw11</i>	F-box and WD-40 domain protein 11	0.26	0.051
<i>Trim35</i>	tripartite motif-containing 35	0.27	0.051
<i>Epb4.1l2</i>	erythrocyte protein band 4.1-like 2	0.27	0.051
<i>Ptx3</i>	pentraxin related gene	0.28	0.051
<i>Ndst1</i>	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 1	0.30	0.051
<i>Calcr1</i>	calcitonin receptor-like	0.30	0.051
<i>Tmem33</i>	transmembrane protein 33	0.30	< 0.001
<i>Abca1</i>	ATP-binding cassette, sub-family A (ABC1), member 1	0.30	0.051
<i>Mme</i>	membrane metallo endopeptidase	0.30	< 0.001
<i>Tm9sf3</i>	transmembrane 9 superfamily member 3	0.31	0.051
<i>Jhdm1d</i>	jumonji C domain-containing histone demethylase 1 homolog D (<i>S. cerevisiae</i>)	0.31	0.051
<i>Spry4</i>	sprouty homolog 4 (<i>Drosophila</i>)	0.31	0.051
<i>Spty2d1</i>	SPT2, Suppressor of Ty, domain containing 1 (<i>S. cerevisiae</i>)	0.31	< 0.001
<i>Osmr</i>	oncostatin M receptor	0.31	< 0.001
<i>Ide</i>	insulin degrading enzyme	0.31	< 0.001
<i>Sigmar1</i>	sigma non-opioid intracellular receptor 1	0.32	< 0.001
<i>Adamts4</i>	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 4	0.32	< 0.001
<i>Mtpn</i>	myotrophin	0.32	0.051
<i>Stk38l</i>	serine/threonine kinase 38 like	0.32	0.051
<i>4833439L19Rik</i>	RIKEN cDNA 4833439L19 gene	0.33	0.051
<i>Podxl</i>	podocalyxin-like	0.33	0.051
<i>Ranbp6</i>	RAN binding protein 6	0.33	< 0.001
<i>Cd38</i>	CD38 antigen	0.33	0.051
<i>Slc23a2</i>	solute carrier family 23 (nucleobase transporters), member 2	0.34	0.051
<i>4932438A13Rik</i>	RIKEN cDNA 4932438A13 gene	0.34	0.051
<i>Map3k7</i>	mitogen-activated protein kinase kinase kinase 7	0.34	< 0.001

<i>Dep1</i>	diabetic embryopathy 1	0.34	0.051
<i>Ccl9</i>	chemokine (C-C motif) ligand 9	0.34	< 0.001
<i>Pkia</i>	protein kinase inhibitor, alpha	0.34	0.051
<i>Ptprk</i>	protein tyrosine phosphatase, receptor type, K	0.35	0.051
<i>Spon2</i>	spondin 2, extracellular matrix protein	0.35	0.051
<i>Lims1</i>	LIM and senescent cell antigen-like domains 1	0.35	0.051
<i>A630005I04Rik</i>	RIKEN cDNA A630005I04 gene	0.35	< 0.001
<i>Brc3</i>	BRCA1/BRCA2-containing complex, subunit 3	0.35	0.051
<i>0610010K06Rik</i>	RIKEN cDNA 0610010K06 gene	0.36	0.051
<i>Tgfb2</i>	transforming growth factor, beta receptor II	0.36	0.051
<i>Nr3c1</i>	nuclear receptor subfamily 3, group C, member 1	0.36	0.051
<i>Tollip</i>	toll interacting protein	0.36	0.051
<i>Ube3a</i>	ubiquitin protein ligase E3A	0.36	0.051
<i>Vamp3</i>	vesicle-associated membrane protein 3	0.36	0.051
<i>Msrb3</i>	methionine sulfoxide reductase B3	0.36	< 0.001
<i>Prkcc</i>	protein kinase C, gamma	0.37	< 0.001
<i>Arpp19</i>	cAMP-regulated phosphoprotein 19	0.37	< 0.001
<i>Hipk3</i>	homeodomain interacting protein kinase 3	0.37	0.051
<i>Atrx</i>	alpha thalassemia/mental retardation syndrome X-linked homolog (human)	0.37	0.051
<i>Gcnt2</i>	glucosaminyl (N-acetyl) transferase 2, I-branching enzyme	0.37	0.051
<i>Pvr</i>	poliovirus receptor	0.38	0.051
<i>Tmed5</i>	transmembrane emp24 protein transport domain containing 5	0.38	0.051
<i>Egfr</i>	epidermal growth factor receptor	0.38	0.051
<i>Pla2g15</i>	phospholipase A2, group XV	0.38	0.051
<i>1110018J18Rik</i>	RIKEN cDNA 1110018J18 gene	0.38	0.051
<i>Fam63a</i>	family with sequence similarity 63, member A	0.38	0.051
<i>Sfrp1</i>	secreted frizzled-related protein 1	0.38	< 0.001
<i>Smg1</i>	SMG1 homolog, phosphatidylinositol 3-kinase-related kinase (C. elegans)	0.38	0.051
<i>Pi15</i>	peptidase inhibitor 15	0.38	0.051
<i>Scamp1</i>	secretory carrier membrane protein 1	0.38	0.051
<i>Tgfb1</i>	transforming growth factor, beta receptor I	0.38	0.051
<i>Gorab</i>	golgin, RAB6-interacting	0.39	< 0.001
<i>Abhd10</i>	abhydrolase domain containing 10	0.39	< 0.001
<i>Cd59a</i>	CD59a antigen	0.39	< 0.001
<i>Mobkl1b</i>	MOB1, Mps One Binder kinase activator-like 1B (yeast)	0.39	0.051
<i>Ccdc91</i>	coiled-coil domain containing 91	0.39	< 0.001
<i>Ube2b</i>	ubiquitin-conjugating enzyme E2B, RAD6 homology (S. cerevisiae)	0.39	< 0.001
<i>Atl2</i>	atlasin GTPase 2	0.39	< 0.001
<i>Pdlim5</i>	PDZ and LIM domain 5	0.39	0.051
<i>Ccnd2</i>	cyclin D2	0.40	0.051
<i>Garnl1</i>	GTPase activating RANGAP domain-like 1	0.40	0.051
<i>Bcl2l11</i>	BCL2-like 11 (apoptosis facilitator)	0.40	0.051
<i>Slc38a10</i>	solute carrier family 38, member 10	0.40	< 0.001
<i>Rbm18</i>	RNA binding motif protein 18	0.40	0.051
<i>Prkar2a</i>	protein kinase, cAMP dependent regulatory, type II alpha	0.40	0.051
<i>B230219D22Rik</i>	RIKEN cDNA B230219D22 gene	0.40	< 0.001
<i>Plcx2</i>	phosphatidylinositol-specific phospholipase C, X domain	0.40	< 0.001

	containing 2		
<i>Abcb7</i>	ATP-binding cassette, sub-family B (MDR/TAP), member 7	0.40	< 0.001
<i>Carhsp1</i>	calcium regulated heat stable protein 1	0.40	< 0.001
<i>Gna13</i>	guanine nucleotide binding protein, alpha 13	0.40	< 0.001
<i>1700109H08Rik</i>	RIKEN cDNA 1700109H08 gene	0.40	< 0.001
<i>1600029D21Rik</i>	RIKEN cDNA 1600029D21 gene	0.40	< 0.001
<i>Nktr</i>	natural killer tumor recognition sequence	0.41	0.051
<i>Tgoln1</i>	trans-golgi network protein	0.41	0.051
<i>Cybb</i>	cytochrome b-245, beta polypeptide	0.41	< 0.001
<i>Golph3</i>	golgi phosphoprotein 3	0.41	0.051
<i>Trim15</i>	tripartite motif-containing 15	0.41	0.051
<i>Prkab1</i>	protein kinase, AMP-activated, beta 1 non-catalytic subunit	0.41	< 0.001
<i>Lypla1</i>	lysophospholipase 1	0.41	0.051
<i>Zfand5</i>	zinc finger, AN1-type domain 5	0.41	0.051
<i>Plek</i>	pleckstrin	0.41	0.051
<i>Immt</i>	inner membrane protein, mitochondrial	0.41	0.051
<i>Cpeb4</i>	cytoplasmic polyadenylation element binding protein 4	0.41	0.051
<i>9030624J02Rik</i>	RIKEN cDNA 9030624J02 gene	0.41	0.051
<i>Alpl</i>	alkaline phosphatase, liver/bone/kidney	0.41	< 0.001
<i>Itm2a</i>	integral membrane protein 2A	0.41	< 0.001
<i>Ada</i>	adenosine deaminase	0.42	< 0.001
<i>2310035C23Rik</i>	RIKEN cDNA 2310035C23 gene	0.42	0.051
<i>Vtn</i>	vitronectin	0.42	< 0.001
<i>Rad52</i>	RAD52 homolog (S. cerevisiae)	0.42	< 0.001
<i>Txndc9</i>	thioredoxin domain containing 9	0.42	< 0.001
<i>Pdgfd</i>	platelet-derived growth factor, D polypeptide	0.42	< 0.001
<i>Pfkp</i>	phosphofructokinase, platelet	0.42	0.051
<i>Tmed7</i>	transmembrane emp24 protein transport domain containing 7	0.42	0.051
<i>Pfkfb3</i>	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3	0.42	0.051
<i>Tnfsf9</i>	tumor necrosis factor (ligand) superfamily, member 9	0.42	< 0.001
<i>Vipr2</i>	vasoactive intestinal peptide receptor 2	0.43	< 0.001
<i>Tug1</i>	taurine upregulated gene 1	0.43	0.051
<i>Ahcyl1</i>	S-adenosylhomocysteine hydrolase-like 1	0.43	0.051
<i>Slc35a3</i>	solute carrier family 35 (UDP-N-acetylglucosamine (UDP-GlcNAc) transporter), member 3	0.43	0.051
<i>Ahcyl2</i>	S-adenosylhomocysteine hydrolase-like 2	0.43	< 0.001
<i>Arhgap29</i>	Rho GTPase activating protein 29	0.43	0.051
<i>Usp9x</i>	ubiquitin specific peptidase 9, X chromosome	0.43	0.051
<i>Pard6g</i>	par-6 partitioning defective 6 homolog gamma (C. elegans)	0.43	< 0.001
<i>Gna12</i>	guanine nucleotide binding protein, alpha 12	0.43	0.051
<i>Tfrc</i>	transferrin receptor	0.43	0.051
<i>Slc6a2</i>	solute carrier family 6 (neurotransmitter transporter, noradrenalin), member 2	0.43	< 0.001
<i>Twsg1</i>	twisted gastrulation homolog 1 (Drosophila)	0.43	0.051
<i>Ids</i>	iduronate 2-sulfatase	0.43	0.051
<i>Tifa</i>	TRAF-interacting protein with forkhead-associated domain	0.44	0.051
<i>Cyb5b</i>	cytochrome b5 type B	0.44	0.051
<i>Rcan1</i>	regulator of calcineurin 1	0.44	0.051
<i>Ereg</i>	epiregulin	0.44	0.051
<i>Mapk14</i>	mitogen-activated protein kinase 14	0.44	0.051

<i>Flt3l</i>	FMS-like tyrosine kinase 3 ligand	0.44	< 0.001
<i>Cdkn1a</i>	cyclin-dependent kinase inhibitor 1A (P21)	0.44	< 0.001
<i>Cugbp1</i>	CUG triplet repeat, RNA binding protein 1	0.44	< 0.001
<i>Klhl5</i>	kelch-like 5 (Drosophila)	0.44	< 0.001
<i>Adam17</i>	a disintegrin and metallopeptidase domain 17	0.44	< 0.001
<i>Has1</i>	hyaluronan synthase1	0.44	0.051
<i>C1galt1</i>	core 1 synthase, glycoprotein-N-acetylgalactosamine 3-beta-galactosyltransferase, 1	0.44	0.051
<i>Fam114a1</i>	family with sequence similarity 114, member A1	0.44	< 0.001
<i>1200011I18Rik</i>	RIKEN cDNA 1200011I18 gene	0.45	0.051
<i>Cpeb2</i>	cytoplasmic polyadenylation element binding protein 2	0.45	0.051
<i>Bdp1</i>	B double prime 1, subunit of RNA polymerase III transcription initiation factor IIIB	0.45	< 0.001
<i>Polr3c</i>	polymerase (RNA) III (DNA directed) polypeptide C	0.45	0.051
<i>Clec4n</i>	C-type lectin domain family 4, member n	0.45	< 0.001
<i>Nek6</i>	NIMA (never in mitosis gene a)-related expressed kinase 6	0.45	< 0.001
<i>Sprrla</i>	small proline-rich protein 1A	0.45	< 0.001
<i>Rp2h</i>	retinitis pigmentosa 2 homolog (human)	0.45	< 0.001
<i>Plcb1</i>	phospholipase C, beta 1	0.45	< 0.001
<i>Stk3</i>	serine/threonine kinase 3 (Ste20, yeast homolog)	0.45	0.051
<i>Bicd2</i>	bicaudal D homolog 2 (Drosophila)	0.46	< 0.001
<i>Ptar1</i>	protein prenyltransferase alpha subunit repeat containing 1	0.46	0.051
<i>P4ha1</i>	procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha 1 polypeptide	0.46	0.051
<i>Vcam1</i>	vascular cell adhesion molecule 1	0.46	< 0.001
<i>Nol11</i>	nucleolar protein 11	0.46	0.051
<i>Ywhag</i>	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide	0.46	0.051
<i>Tspan2</i>	tetraspanin 2	0.46	0.051
<i>Nrp</i>	neural regeneration protein	0.46	< 0.001
<i>Rnf141</i>	ring finger protein 141	0.46	< 0.001
<i>Arid4b</i>	AT rich interactive domain 4B (RBP1-like)	0.46	0.051
<i>2210018M11Rik</i>	RIKEN cDNA 2210018M11 gene	0.46	< 0.001
<i>Vsnl1</i>	visinin-like 1	0.46	< 0.001
<i>Twf1</i>	twinfilin, actin-binding protein, homolog 1 (Drosophila)	0.46	< 0.001
<i>Entpd1</i>	ectonucleoside triphosphate diphosphohydrolase 1	0.46	< 0.001
<i>Slc35a5</i>	solute carrier family 35, member A5	0.46	< 0.001
<i>Tmed2</i>	transmembrane emp24 domain trafficking protein 2	0.47	0.051
<i>Litaf</i>	LPS-induced TN factor	0.47	< 0.001
<i>Mrpl50</i>	mitochondrial ribosomal protein L50	0.47	< 0.001
<i>Dcun1d1</i>	DCN1, defective in cullin neddylation 1, domain containing 1 (<i>S. cerevisiae</i>)	0.47	0.051
<i>Plekha3</i>	pleckstrin homology domain-containing, family A (phosphoinositide binding specific) member 3	0.47	0.051
<i>Mbd1</i>	methyl-CpG binding domain protein 1	0.47	< 0.001
<i>Hipk2</i>	homeodomain interacting protein kinase 2	0.47	< 0.001
<i>Slc38a4</i>	solute carrier family 38, member 4	0.47	< 0.001
<i>Elmo1</i>	engulfment and cell motility 1, ced-12 homolog (C. elegans)	0.47	0.051
<i>Dr1</i>	down-regulator of transcription 1	0.47	0.051
<i>Ap3m1</i>	adaptor-related protein complex 3, mu 1 subunit	0.47	0.051

<i>2700078E11Rik</i>	RIKEN cDNA 2700078E11 gene	0.47	< 0.001
<i>Kpna1</i>	karyopherin (importin) alpha 1	0.47	< 0.001
<i>Ubr1</i>	ubiquitin protein ligase E3 component n-recognin 1	0.47	0.051
<i>Wwc2</i>	WW, C2 and coiled-coil domain containing 2	0.47	0.051
<i>EG665955</i>	predicted gene, EG665955	0.47	0.051
<i>Nt5c2</i>	5'-nucleotidase, cytosolic II	0.47	0.051
<i>Gng2</i>	guanine nucleotide binding protein (G protein), gamma 2	0.47	< 0.001
<i>1500003O03Rik</i>	RIKEN cDNA 1500003O03 gene	0.47	0.051
<i>Gulp1</i>	GULP, engulfment adaptor PTB domain containing 1	0.47	< 0.001
<i>Rapgef1</i>	Rap guanine nucleotide exchange factor (GEF) 1	0.47	< 0.001
<i>Cacna2d1</i>	calcium channel, voltage-dependent, alpha2/delta subunit 1	0.47	< 0.001
<i>Cd44</i>	CD44 antigen	0.47	0.051
<i>Slc26a4</i>	solute carrier family 26, member 4	0.47	< 0.001
<i>Gosr1</i>	golgi SNAP receptor complex member 1	0.48	0.051
<i>Ppargc1a</i>	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	0.48	< 0.001
<i>Fam107a</i>	family with sequence similarity 107, member A	0.48	< 0.001
<i>Sel1l</i>	sel-1 suppressor of lin-12-like (C. elegans)	0.48	0.051
<i>Pdgfra</i>	platelet derived growth factor receptor, alpha polypeptide	0.48	0.051
<i>Gucy1a3</i>	guanylate cyclase 1, soluble, alpha 3	0.48	0.051
<i>Ddh1</i>	DDHD domain containing 1	0.48	< 0.001
<i>Akt3</i>	thymoma viral proto-oncogene 3	0.48	0.051
<i>Pxn</i>	paxillin	0.48	0.051
<i>Rasd1</i>	RAS, dexamethasone-induced 1	0.48	< 0.001
<i>Hmgcs2</i>	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 2	0.48	< 0.001
<i>Acsl4</i>	acyl-CoA synthetase long-chain family member 4	0.48	< 0.001
<i>Kpna3</i>	karyopherin (importin) alpha 3	0.48	0.051
<i>D10Ertd709e</i>	DNA segment, Chr 10, ERATO Doi 709, expressed	0.48	< 0.001
<i>Rnf13</i>	ring finger protein 13	0.48	0.051
<i>Dio2</i>	deiodinase, iodothyronine, type II	0.48	< 0.001
<i>Man1a2</i>	mannosidase, alpha, class 1A, member 2	0.48	0.051
<i>Lin7c</i>	lin-7 homolog C (C. elegans)	0.48	0.051
<i>Nat12</i>	N-acetyltransferase 12	0.48	0.051
<i>Braf</i>	Braf transforming gene	0.48	< 0.001
<i>Sp1</i>	trans-acting transcription factor 1	0.48	< 0.001
<i>Prps2</i>	phosphoribosyl pyrophosphate synthetase 2	0.48	0.051
<i>Hbp1</i>	high mobility group box transcription factor 1	0.48	0.051
<i>Ptprb</i>	protein tyrosine phosphatase, receptor type, B	0.49	< 0.001
<i>Arhgef2</i>	rho/rac guanine nucleotide exchange factor (GEF) 2	0.49	0.051
<i>Ints8</i>	integrator complex subunit 8	0.49	0.051
<i>Ednra</i>	endothelin receptor type A	0.49	< 0.001
<i>Rbbp4</i>	retinoblastoma binding protein 4	0.49	< 0.001
<i>Xiap</i>	X-linked inhibitor of apoptosis	0.49	0.051
<i>Lmnb1</i>	lamin B1	0.49	< 0.001
<i>Trib2</i>	tribbles homolog 2 (Drosophila)	0.49	0.051
<i>Pafah1b2</i>	platelet-activating factor acetylhydrolase, isoform 1b, subunit 2	0.49	< 0.001
<i>Rps6kb1</i>	ribosomal protein S6 kinase, polypeptide 1	0.49	0.051
<i>Pcnx</i>	pecanex homolog (Drosophila)	0.49	0.051
<i>Otud4</i>	OTU domain containing 4	0.49	0.051
<i>Etnk1</i>	ethanolamine kinase 1	0.49	0.051

<i>Cxcl1</i>	chemokine (C-X-C motif) ligand 1	0.49	0.051
<i>Gnptab</i>	N-acetylglucosamine-1-phosphate transferase, alpha and beta subunits	0.49	0.051
<i>Ly6g6c</i>	lymphocyte antigen 6 complex, locus G6C	0.49	0.051
<i>Mier1</i>	mesoderm induction early response 1 homolog (<i>Xenopus laevis</i>)	0.49	0.051
<i>Eif4h</i>	eukaryotic translation initiation factor 4H	0.49	0.051
<i>Sema3c</i>	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C	0.49	0.051
<i>Cap1</i>	CAP, adenylate cyclase-associated protein 1 (yeast)	0.49	0.051
<i>1810030O07Rik</i>	RIKEN cDNA 1810030O07 gene	0.49	0.051
<i>5730416O20Rik</i>	RIKEN cDNA 5730416O20 gene	0.49	0.051
<i>Usp12</i>	ubiquitin specific peptidase 12	0.50	< 0.001
<i>Atp8a1</i>	ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	0.50	< 0.001
<i>Chn1</i>	chimerin (chimaerin) 1	0.50	< 0.001
<i>Rrm2b</i>	ribonucleotide reductase M2 B (TP53 inducible)	0.50	< 0.001
<i>Appl1</i>	adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1	0.50	< 0.001
<i>Adam10</i>	a disintegrin and metallopeptidase domain 10	0.50	0.051
<i>Dapp1</i>	dual adaptor for phosphotyrosine and 3-phosphoinositides 1	0.50	0.051
<i>Cpd</i>	carboxypeptidase D	0.50	0.051
<i>6720457D02Rik</i>	RIKEN cDNA 6720457D02 gene	2.01	< 0.001
<i>Pgm2l1</i>	phosphoglucomutase 2-like 1	2.01	< 0.001
<i>Slco4c1</i>	solute carrier organic anion transporter family, member 4C1	2.01	< 0.001
<i>Zc3h15</i>	zinc finger CCCH-type containing 15	2.02	< 0.001
<i>Trmt6</i>	tRNA methyltransferase 6 homolog (<i>S. cerevisiae</i>)	2.02	< 0.001
<i>Nhsl2</i>	NHS-like 2	2.02	< 0.001
<i>Ankrd11</i>	ankyrin repeat domain 11	2.02	< 0.001
<i>Zfp292</i>	zinc finger protein 292	2.03	< 0.001
<i>Mical2</i>	microtubule associated monooxygenase, calponin and LIM domain containing 2	2.03	< 0.001
<i>Pisd-ps3</i>	phosphatidylserine decarboxylase, pseudogene 3	2.04	< 0.001
<i>Phka2</i>	phosphorylase kinase alpha 2	2.04	< 0.001
<i>Nup214</i>	nucleoporin 214	2.04	< 0.001
<i>6820402A03Rik</i>	RIKEN cDNA 6820402A03 gene	2.04	< 0.001
<i>Hnrnpu</i>	heterogeneous nuclear ribonucleoprotein U	2.05	< 0.001
<i>Gata2b</i>	GATA zinc finger domain containing 2B	2.06	< 0.001
<i>A330076H08Rik</i>	RIKEN cDNA A330076H08 gene	2.06	< 0.001
<i>9430047G12Rik</i>	RIKEN cDNA 9430047G12 gene	2.06	< 0.001
<i>Fubp1</i>	far upstream element (FUSE) binding protein 1	2.07	< 0.001
<i>Wdfy3</i>	WD repeat and FYVE domain containing 3	2.09	< 0.001
<i>Cdkn1b</i>	cyclin-dependent kinase inhibitor 1B	2.09	< 0.001
<i>4933411K20Rik</i>	RIKEN cDNA 4933411K20 gene	2.10	< 0.001
<i>Kank2</i>	KN motif and ankyrin repeat domains 2	2.10	< 0.001
<i>Vps13a</i>	vacuolar protein sorting 13A (yeast)	2.11	< 0.001
<i>Lrrk1</i>	leucine-rich repeat kinase 1	2.12	< 0.001
<i>Iqgap1</i>	IQ motif containing GTPase activating protein 1	2.12	< 0.001
<i>Gan</i>	giant axonal neuropathy	2.13	< 0.001
<i>Nr2f2</i>	nuclear receptor subfamily 2, group F, member 2	2.13	< 0.001
<i>Usp37</i>	ubiquitin specific peptidase 37	2.13	< 0.001

<i>Eif2c3</i>	eukaryotic translation initiation factor 2C, 3	2.15	< 0.001
<i>Zbtb7a</i>	zinc finger and BTB domain containing 7a	2.15	< 0.001
<i>Zfp207</i>	zinc finger protein 207	2.16	< 0.001
<i>Rapgef6</i>	Rap guanine nucleotide exchange factor (GEF) 6	2.17	< 0.001
<i>Snapc5</i>	small nuclear RNA activating complex, polypeptide 5	2.17	< 0.001
<i>4933407K13Rik</i>	RIKEN cDNA 4933407K13 gene	2.18	< 0.001
<i>Sord</i>	sorbitol dehydrogenase	2.18	< 0.001
<i>Tle4</i>	transducin-like enhancer of split 4, homolog of Drosophila E(spl)	2.18	0.085
<i>Rbm26</i>	RNA binding motif protein 26	2.18	< 0.001
<i>6430548M08Rik</i>	RIKEN cDNA 6430548M08 gene	2.19	< 0.001
<i>4833420G17Rik</i>	RIKEN cDNA 4833420G17 gene	2.20	< 0.001
<i>Casc4</i>	cancer susceptibility candidate 4	2.21	< 0.001
<i>Ammecr1</i>	Alport syndrome, mental retardation, midface hypoplasia and elliptocytosis chromosomal region gene 1 homolog (human)	2.21	< 0.001
<i>A930038C07Rik</i>	RIKEN cDNA A930038C07 gene	2.22	< 0.001
<i>Gria3</i>	glutamate receptor, ionotropic, AMPA3 (alpha 3)	2.22	< 0.001
<i>Fam117b</i>	family with sequence similarity 117, member B	2.22	< 0.001
<i>Sfi1</i>	Sfi1 homolog, spindle assembly associated (yeast)	2.24	< 0.001
<i>Rap2b</i>	RAP2B, member of RAS oncogene family	2.24	< 0.001
<i>Epn2</i>	epsin 2	2.24	< 0.001
<i>AU018466</i>	expressed sequence AU018466	2.25	< 0.001
<i>Sema6d</i>	sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6D	2.25	0.085
<i>Zbtb16</i>	zinc finger and BTB domain containing 16	2.26	< 0.001
<i>Atp11c</i>	ATPase, class VI, type 11C	2.26	< 0.001
<i>C78505</i>	expressed sequence C78505	2.27	< 0.001
<i>Rian</i>	RNA imprinted and accumulated in nucleus	2.27	0.085
<i>Arrdc3</i>	arrestin domain containing 3	2.28	< 0.001
<i>C77405</i>	expressed sequence C77405	2.29	< 0.001
<i>Ccrl1</i>	chemokine (C-C motif) receptor-like 1	2.32	0.085
<i>Cml3</i>	camello-like 3	2.33	< 0.001
<i>Gm10883</i>	predicted gene 10883	2.33	< 0.001
<i>Gnal</i>	guanine nucleotide binding protein, alpha stimulating, olfactory type	2.33	< 0.001
<i>Clec16a</i>	C-type lectin domain family 16, member A	2.33	< 0.001
<i>E130012A19Rik</i>	RIKEN cDNA E130012A19 gene	2.33	< 0.001
<i>Scaper</i>	S phase cyclin A-associated protein in the ER	2.37	< 0.001
<i>D5Ertd579e</i>	DNA segment, Chr 5, ERATO Doi 579, expressed	2.38	< 0.001
<i>Malat1</i>	metastasis associated lung adenocarcinoma transcript 1 (non-coding RNA)	2.38	< 0.001
<i>C80425</i>	expressed sequence C80425	2.39	< 0.001
<i>Nnt</i>	nicotinamide nucleotide transhydrogenase	2.40	< 0.001
<i>Crkrs</i>	CDC2-related kinase, arginine-serine-rich	2.41	< 0.001
<i>Usp15</i>	ubiquitin specific peptidase 15	2.41	< 0.001
<i>Acbd3</i>	acyl-Coenzyme A binding domain containing 3	2.42	< 0.001
<i>Zfx</i>	zinc finger protein X-linked	2.42	< 0.001
<i>Mbnl1</i>	muscleblind-like 1 (Drosophila)	2.45	< 0.001
<i>Dnmt1</i>	DNA methyltransferase (cytosine-5) 1	2.46	< 0.001
<i>2610020P09Rik</i>	RIKEN cDNA 2610020P09 gene	2.48	< 0.001

<i>Ylpm1</i>	YLP motif containing 1	2.49	< 0.001
<i>Gabpb2</i>	GA repeat binding protein, beta 2	2.49	< 0.001
<i>Cys1</i>	cystin 1	2.52	< 0.001
<i>Dbp</i>	D site albumin promoter binding protein	2.55	< 0.001
<i>Baz2a</i>	bromodomain adjacent to zinc finger domain, 2A	2.57	< 0.001
<i>Plcb4</i>	phospholipase C, beta 4	2.57	< 0.001
<i>Tnrc18</i>	trinucleotide repeat containing 18	2.58	< 0.001
<i>Elk3</i>	ELK3, member of ETS oncogene family	2.58	< 0.001
<i>Fbxo32</i>	F-box protein 32	2.59	< 0.001
<i>Ngp</i>	neutrophilic granule protein	2.59	0.085
<i>Sfpq</i>	splicing factor proline/glutamine rich (polypyrimidine tract binding protein associated)	2.63	< 0.001
<i>Tdo2</i>	tryptophan 2,3-dioxygenase	2.63	< 0.001
<i>5830407P18Rik</i>	RIKEN cDNA 5830407P18 gene	2.66	< 0.001
<i>Trpm7</i>	transient receptor potential cation channel, subfamily M, member 7	2.67	< 0.001
<i>Cbx5</i>	chromobox homolog 5 (Drosophila HP1a)	2.67	< 0.001
<i>Vps4b</i>	vacuolar protein sorting 4b (yeast)	2.68	< 0.001
<i>BC005685</i>	cDNA sequence BC005685	2.71	< 0.001
<i>Igh</i>	immunoglobulin heavy chain complex	2.73	< 0.001
<i>Per3</i>	period homolog 3 (Drosophila)	2.75	< 0.001
<i>LOC667118</i>	zinc finger, BED domain containing 4 pseudogene	2.77	< 0.001
<i>Tef</i>	thyrotroph embryonic factor	2.78	< 0.001
<i>Hjurp</i>	Holliday junction recognition protein	2.82	< 0.001
<i>2610024D14Rik</i>	RIKEN cDNA 2610024D14 gene	2.89	< 0.001
<i>Stfa2l1</i>	stefin A2 like 1	2.94	< 0.001
<i>Zfp101</i>	zinc finger protein 101	2.94	< 0.001
<i>Utrn</i>	utrophin	2.96	< 0.001
<i>2610301F02Rik</i>	RIKEN cDNA 2610301F02 gene	3.03	< 0.001
<i>NA</i>	NA	3.08	0.085
<i>Cep110</i>	centrosomal protein 110	3.16	< 0.001
<i>Mga</i>	MAX gene associated	3.30	< 0.001
<i>Airn</i>	antisense Igf2r RNA	3.33	< 0.001
<i>4921513D23Rik</i>	RIKEN cDNA 4921513D23 gene	3.34	< 0.001
<i>Hlf</i>	hepatic leukemia factor	3.34	< 0.001
<i>Crebbp</i>	CREB binding protein	3.40	< 0.001
<i>Slc15a2</i>	solute carrier family 15 (H+/peptide transporter), member 2	3.59	< 0.001
<i>Cd163l1</i>	CD163 molecule-like 1	3.61	< 0.001
<i>Nckap1l</i>	NCK associated protein 1 like	3.74	< 0.001
<i>Mid1</i>	midline 1	3.77	< 0.001
<i>Dab2ip</i>	disabled homolog 2 (Drosophila) interacting protein	3.81	< 0.001
<i>Bat2d</i>	BAT2 domain containing 1	3.94	< 0.001
<i>Dnmt3a</i>	DNA methyltransferase 3A	4.15	< 0.001
<i>Plec1</i>	plectin 1	5.21	< 0.001
<i>Ighg</i>	Immunoglobulin heavy chain (gamma polypeptide)	5.29	< 0.001
<i>Igj</i>	immunoglobulin joining chain	8.34	< 0.001

^a FC: fold change, which is calculated by dividing the expression in VILI-exposed nmMLCK KO mice by the expression in WT VILI-exposed mice.