

**Supplemental Table 2 Differentially expressed genes with MON-DNJ**

Gene Symbol	Gene Name
AARS	alanyl-tRNA synthetase
ABAT	4-aminobutyrate aminotransferase
ACN9	ACN9 homolog ( <i>S. cerevisiae</i> )
ACP5	Acid phosphatase 5, tartrate resistant
ADA	Adenosine deaminase
ADI1	Acireductone dioxygenase 1
AGPAT9	1-acylglycerol-3-phosphate O-acyltransferase 9
ALDH1L2	Aldehyde dehydrogenase 1 family, member L2
ALDH5A1	Aldehyde dehydrogenase 5 family, member A1
ALG13	Asparagine-linked glycosylation 13 homolog ( <i>S. cerevisiae</i> )
ALK	Anaplastic lymphoma receptor tyrosine kinase
ALOX15B	Arachidonate 15-lipoxygenase, type B
AMY2B	Amylase, alpha 2B (pancreatic)
ANG	Angiogenin, ribonuclease, RNase A family, 5
ANKRD1	Ankyrin repeat domain 1 (cardiac muscle)
ANP32A	Acidic (leucine-rich) nuclear phosphoprotein 32 family, member A
APP	Amyloid beta (A4) precursor protein
ARHGEF10L	Rho guanine nucleotide exchange factor (GEF) 10-like
ARMCX2	Armadillo repeat containing, X-linked 2
ASNA1	arsA arsenite transporter, ATP-binding, homolog 1 (bacterial)
ASNS	Asparagine synthetase (glutamine-hydrolyzing)
ATF3	Activating transcription factor 3
ATF4	Activating transcription factor 4 (tax-responsive enhancer element B67)
ATF7IP2	Activating transcription factor 7 interacting protein 2
ATL1	Atlastin GTPase 1
ATMIN	ATM interactor
ATP1B1	ATPase, Na+/K+ transporting, beta 1 polypeptide
ATP2A2	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2
ATXN3	Ataxin 3
B3GNT5	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5
BANP	BTG3 associated nuclear protein
BATF	Basic leucine zipper transcription factor, ATF-like
BCAS2	Breast carcinoma amplified sequence 2
BCL2A1	BCL2-related protein A1
BEX2	Brain expressed X-linked 2
BORA	Bora, aurora kinase A activator
C12orf23	Chromosome 12 open reading frame 23
C12orf65	Chromosome 12 open reading frame 65
C1D	C1D nuclear receptor corepressor
C1QTNF1	C1q and tumor necrosis factor related protein 1
C6orf62	Chromosome 6 open reading frame 62
CABLES2	Cdk5 and Abl enzyme substrate 2
CALR	Calreticulin
CAPZA1	Capping protein (actin filament) muscle Z-line, alpha 1
CARS	cysteinyl-tRNA synthetase
CAST	Calpastatin
CBWD1	COBW domain containing 1
CCDC167	Coiled-coil domain containing 167
CCDC28B	Coiled-coil domain containing 28B
CCDC60	Coiled-coil domain containing 60
CCL23	Chemokine (C-C motif) ligand 23
CCL4L2	Chemokine (C-C motif) ligand 4-like 2
CCNG2	Cyclin G2
CCPG1	Cell cycle progression 1
CD163	CD163 molecule
CD164	CD164 molecule, sialomucin
CD276	CD276 molecule
CD36	CD36 molecule (thrombospondin receptor)
CD38	CD38 molecule
CDC42EP3	CDC42 effector protein (Rho GTPase binding) 3
CDK2AP2	Cyclin-dependent kinase 2 associated protein 2
CDR2	Cerebellar degeneration-related protein 2, 62kDa
CDRT4	CMT1A duplicated region transcript 4
CHST2	Carbohydrate (N-acetylglucosamine-6-O) sulfotransferase 2
CISD2	CDGSH iron sulfur domain 2
CLIC2	Chloride intracellular channel 2

COMMD8	COMM domain containing 8
CRELD1	Cysteine-rich with EGF-like domains 1
CRELD2	Cysteine-rich with EGF-like domains 2
CTNNB1	Catenin (cadherin-associated protein), beta 1, 88kDa
CTNS	Cystinosin, lysosomal cystine transporter
CTR9	Ctr9, Paf1/RNA polymerase II complex component, homolog ( <i>S. cerevisiae</i> )
CYB561	Cytochrome b-561
CYP27B1	Cytochrome P450, family 27, subfamily B, polypeptide 1
CYP51A1	Cytochrome P450, family 51, subfamily A, polypeptide 1
DDIT3	DNA-damage-inducible transcript 3
DDIT4	DNA-damage-inducible transcript 4
DDX17	DEAD (Asp-Glu-Ala-Asp) box helicase 17
DERL2	Derlin 2
DHRS11	Dehydrogenase/reductase (SDR family) member 11
DNAAF1	Dynein, axonemal, assembly factor 1
DNAJA4	DnaJ (Hsp40) homolog, subfamily A, member 4
DNAJB11	DnaJ (Hsp40) homolog, subfamily B, member 11
DNAJB5	DnaJ (Hsp40) homolog, subfamily B, member 5
DNAJB9	DnaJ (Hsp40) homolog, subfamily B, member 9
DNAJC10	DnaJ (Hsp40) homolog, subfamily C, member 10
DPCR1	Diffuse panbronchiolitis critical region 1
DPYD	Dihydropyrimidine dehydrogenase
DTX3L	Deltex 3-like ( <i>Drosophila</i> )
DUSP6	Dual specificity phosphatase 6
DYNC1LI1	Dynein, cytoplasmic 1, light intermediate chain 1
DYRK2	Dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2
EBI3	Epstein-Barr virus induced 3
EEF1B2	Eukaryotic translation elongation factor 1 beta 2
EEPD1	Endonuclease/exonuclease/phosphatase family domain containing 1
EIF2AK3	Eukaryotic translation initiation factor 2-alpha kinase 3
ELOVL6	ELOVL fatty acid elongase 6
ENTPD7	Ectonucleoside triphosphate diphosphohydrolase 7
ERO1LB	ERO1-like beta ( <i>S. cerevisiae</i> )
EVI5L	Ecotropic viral integration site 5-like
EVL	Enah/Vasp-like
EXT1	Exostosin 1
FABP5	Fatty acid binding protein 5 (psoriasis-associated)
FAM129A	Family with sequence similarity 129, member A
FAM63A	Family with sequence similarity 63, member A
FAM70A	Family with sequence similarity 70, member A
FANCE	Fanconi anemia, complementation group E
FGFBP3	Fibroblast growth factor binding protein 3
FICD	FIC domain containing
FKBP11	FK506 binding protein 11, 19 kDa
FKBP14	FK506 binding protein 14, 22 kDa
FKBP2	FK506 binding protein 2, 13kDa
FKBP4	FK506 binding protein 4, 59kDa
FKBP5	FK506 binding protein 5
FNDC3A	Fibronectin type III domain containing 3A
FNDC3B	Fibronectin type III domain containing 3B
FPR1	Formyl peptide receptor 1
FPR3	Formyl peptide receptor 3
FZD2	Frizzled family receptor 2
G3BP1	GTPase activating protein (SH3 domain) binding protein 1
GABARAPL2	GABA(A) receptor-associated protein-like 2
GABRE	Gamma-aminobutyric acid (GABA) A receptor, epsilon
GADD45GIP1	Growth arrest and DNA-damage-inducible, gamma interacting protein 1
GCLC	Glutamate-cysteine ligase, catalytic subunit
GDF15	Growth differentiation factor 15
GFPT1	Glutamine--fructose-6-phosphate transaminase 1
GMPPB	GDP-mannose pyrophosphorylase B
GNB4	Guanine nucleotide binding protein (G protein), beta polypeptide 4
GNG10	Guanine nucleotide binding protein (G protein), gamma 10
GNL3	Guanine nucleotide binding protein-like 3 (nucleolar)
GOT1	Glutamic-oxaloacetic transaminase 1, soluble (aspartate aminotransferase 1)
GPR132	G protein-coupled receptor 132
GPR183	G protein-coupled receptor 183
GPT2	Glutamic pyruvate transaminase (alanine aminotransferase) 2

GRAMD1A	GRAM domain containing 1A
GYPC	Glycophorin C (Gerbich blood group)
HABP4	Hyaluronan binding protein 4
HCCS	Holoctochrome c synthase
HERPUD1	Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1
HIAT1	Hippocampus abundant transcript 1
HMGB1	High mobility group box 1
HRSP12	Heat-responsive protein 12
HSP90B1	Heat shock protein 90kDa beta (Grp94), member 1
HSPA13	Heat shock protein 70kDa family, member 13
HSPA1A	Heat shock 70kDa protein 1A
HSPA5	Heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)
HSPH1	Heat shock 105kDa/110kDa protein 1
HTRA2	HtrA serine peptidase 2
HYOU1	Hypoxia up-regulated 1
ID2	Inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
IER3	Immediate early response 3
IRAK2	Interleukin-1 receptor-associated kinase 2
ISOC2	Isochorismatase domain containing 2
KCNK6	Potassium channel, subfamily K, member 6
KCTD15	Potassium channel tetramerisation domain containing 15
KIAA1033	KIAA1033
KIAA1279	KIAA1279
KLF4	Kruppel-like factor 4 (gut)
KPNA2	Karyopherin alpha 2 (RAG cohort 1, importin alpha 1)
LAD1	Ladinin 1
LAMB3	Laminin, beta 3
LARP1B	La ribonucleoprotein domain family, member 1B
LARP4	La ribonucleoprotein domain family, member 4
LIG4	Ligase IV, DNA, ATP-dependent
LIMA1	LIM domain and actin binding 1
LIN7C	Lin-7 homolog C (C. elegans)
LMO4	LIM domain only 4
LTBP3	Latent transforming growth factor beta binding protein 3
LY75	Lymphocyte antigen 75
LY9	Lymphocyte antigen 9
LYPLA1	Lysophospholipase I
MAF	V-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian)
MANF	Mesencephalic astrocyte-derived neurotrophic factor
MATK	Megakaryocyte-associated tyrosine kinase
MBNL2	Muscleblind-like splicing regulator 2
ME3	Malic enzyme 3, NADP(+)-dependent, mitochondrial
MED21	Mediator complex subunit 21
MEI1	Meiosis inhibitor 1
MERTK	C-mer proto-oncogene tyrosine kinase
METRNL	Meteorin, glial cell differentiation regulator-like
MFSD2A	Major facilitator superfamily domain containing 2A
MIS12	MIS12, MIND kinetochore complex component, homolog (S. pombe)
MLEC	Malectin
MPLKIP	M-phase specific PLK1 interacting protein
MPV17L2	MPV17 mitochondrial membrane protein-like 2
MSH2	mutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli)
MSTO1	Misato homolog 1 (Drosophila)
MT1G	Metallothionein 1G
MT1H	Metallothionein 1H
MT1M	Metallothionein 1M
MTFR1	Mitochondrial fission regulator 1
MTHFD2	Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, methenyltetrahydrofolate cyclohydrolase
MTMR4	Myotubularin related protein 4
MYOM2	Myomesin 2
N4BP2	NEDD4 binding protein 2
NDUFA5	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 5, 13kDa
NFKBIA	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha
NFXL1	Nuclear transcription factor, X-box binding-like 1
NPLOC4	Nuclear protein localization 4 homolog (S. cerevisiae)
NUCB2	Nucleobindin 2
OSTC	Oligosaccharyltransferase complex subunit
PC	Pyruvate carboxylase

PDE4B	Phosphodiesterase 4B, cAMP-specific
PDIA4	Protein disulfide isomerase family A, member 4
PDIA5	Protein disulfide isomerase family A, member 5
PDIA6	Protein disulfide isomerase family A, member 6
PELI1	Pellino E3 ubiquitin protein ligase 1
PFDN2	Prefoldin subunit 2
PGM3	Phosphoglucomutase 3
PIGA	Phosphatidylinositol glycan anchor biosynthesis, class A
PIK3AP1	Phosphoinositide-3-kinase adaptor protein 1
PIM2	Pim-2 oncogene
PLEKHJ1	Pleckstrin homology domain containing, family J member 1
PNP	Purine nucleoside phosphorylase
PPIG	Peptidylprolyl isomerase G (cyclophilin G)
PPIL1	Peptidylprolyl isomerase (cyclophilin)-like 1
PPP1CB	Protein phosphatase 1, catalytic subunit, beta isozyme
PPP1R15B	Protein phosphatase 1, regulatory subunit 15B
PPP2CB	Protein phosphatase 2, catalytic subunit, beta isozyme
PRKCSH	Protein kinase C substrate 80K-H
PRPF4B	PRP4 pre-mRNA processing factor 4 homolog B (yeast)
PRRC1	Proline-rich coiled-coil 1
PSAT1	Phosphoserine aminotransferase 1
PSMC6	Proteasome (prosome, macropain) 26S subunit, ATPase, 6
PSTPIP2	Proline-serine-threonine phosphatase interacting protein 2
PTGES	Prostaglandin E synthase
PTMA	Prothymosin, alpha
RABAC1	Rab acceptor 1 (prenylated)
RAD9A	RAD9 homolog A ( <i>S. pombe</i> )
RAP1B	RAP1B, member of RAS oncogene family
RCC1	Regulator of chromosome condensation 1
RGS2	Regulator of G-protein signaling 2, 24kDa
RNASE4	Ribonuclease, RNase A family, 4
RNF19B	Ring finger protein 19B
ROCK1	Rho-associated, coiled-coil containing protein kinase 1
RPLP1	Ribosomal protein, large, P1
RPN1	Ribophorin I
RTKN	Rhotekin
RTP4	Receptor (chemosensory) transporter protein 4
SAR1A	SAR1 homolog A ( <i>S. cerevisiae</i> )
SDF2L1	Stromal cell-derived factor 2-like 1
SEC11C	SEC11 homolog C ( <i>S. cerevisiae</i> )
SEC24D	SEC24 family, member D ( <i>S. cerevisiae</i> )
SEC31A	SEC31 homolog A ( <i>S. cerevisiae</i> )
SEL1L	Sel-1 suppressor of lin-12-like ( <i>C. elegans</i> )
SELK	Selenoprotein K
SELT	Selenoprotein T precursor
SEMA3A	Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A
SERPINE1	Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1
SERTAD3	SERTA domain containing 3
SIL1	SIL1 homolog, endoplasmic reticulum chaperone ( <i>S. cerevisiae</i> )
SLA	Src-like-adaptor
SLAMF1	Signaling lymphocytic activation molecule family member 1
SLC10A7	Solute carrier family 10 (sodium/bile acid cotransporter family), member 7
SLC17A9	Solute carrier family 17, member 9
SLC1A4	Solute carrier family 1 (glutamate/neutral amino acid transporter), member 4
SLC1A5	Solute carrier family 1 (neutral amino acid transporter), member 5
SLC22A16	Solute carrier family 22 (organic cation/carnitine transporter), member 16
SLC26A6	Solute carrier family 26, member 6
SLC35B1	Solute carrier family 35, member B1
SLC39A14	Solute carrier family 39 (zinc transporter), member 14
SLC39A8	Solute carrier family 39 (zinc transporter), member 8
SLC3A2	Solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2
SLC7A1	Solute carrier family 7 (cationic amino acid transporter, y <sup>+</sup> system), member 1
SLC7A5	Solute carrier family 7 (amino acid transporter light chain, L system), member 5
SLC9A9	Solute carrier family 9, subfamily A (NHE9, cation proton antiporter 9), member 9
SLFN11	Schlafen family member 11
SP140	SP140 nuclear body protein
SPCS2	Signal peptidase complex subunit 2 homolog ( <i>S. cerevisiae</i> )
SPCS3	Signal peptidase complex subunit 3 homolog ( <i>S. cerevisiae</i> )

SPOCD1	SPOC domain containing 1
SRSF11	Serine/arginine-rich splicing factor 11
SRSF3	Serine/arginine-rich splicing factor 3
ST6GALNAC4	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 4
SUMO1	SMT3 suppressor of mif two 3 homolog 1 ( <i>S. cerevisiae</i> )
SYVN1	Synovial apoptosis inhibitor 1, synoviolin
TAF9	TAF9 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 32kDa
TANK	TRAF family member-associated NFKB activator
TARS	threonyl-tRNA synthetase
TCP1	T-complex 1
TDP2	tyrosyl-DNA phosphodiesterase 2
TES	Testis derived transcript (3 LIM domains)
TLR1	Toll-like receptor 1
TMED7	Transmembrane emp24 protein transport domain containing 7
TMEM163	Transmembrane protein 163
TMEM38B	Transmembrane protein 38B
TMEM39A	Transmembrane protein 39A
TMEM41B	Transmembrane protein 41B
TMEM50B	Transmembrane protein 50B
TMEM91	Transmembrane protein 91
TNFRSF4	Tumor necrosis factor receptor superfamily, member 4
TNFRSF9	Tumor necrosis factor receptor superfamily, member 9
TNFSF10	Tumor necrosis factor (ligand) superfamily, member 10
TOB1	Transducer of ERBB2, 1
TOPORS	Topoisomerase I binding, arginine-serine-rich, E3 ubiquitin protein ligase
TRAF1	TNF receptor-associated factor 1
TRAM2	Translocation associated membrane protein 2
TRIB1	Tribbles homolog 1 ( <i>Drosophila</i> )
TRIB3	Tribbles homolog 3 ( <i>Drosophila</i> )
TRIM47	Tripartite motif containing 47
TRIM5	Tripartite motif containing 5
TSN	Translin
TUBA3D	Tubulin, alpha 3d
TUBB3	Tubulin, beta 3 class III
UAP1	UDP-N-acetylglucosamine pyrophosphorylase 1
UBA5	Ubiquitin-like modifier activating enzyme 5
UBE2T	Ubiquitin-conjugating enzyme E2T (putative)
UBXN1	UBX domain protein 1
UFD1L	Ubiquitin fusion degradation 1 like (yeast)
UGDH	UDP-glucose 6-dehydrogenase
UPB1	Uridopropionate, beta
UQCRH	Ubiquinol-cytochrome c reductase hinge protein
USP18	Ubiquitin specific peptidase 18
VPS26A	Vacuolar protein sorting 26 homolog A ( <i>S. pombe</i> )
VSX2	Visual system homeobox 2
VWF	Von Willebrand factor
WFS1	Wolfram syndrome 1 (wolframin)
WIPI1	WD repeat domain, phosphoinositide interacting 1
WTAP	Wilms tumor 1 associated protein
XCR1	Chemokine (C motif) receptor 1
ZC3H12A	Zinc finger CCCH-type containing 12A
ZFAND2A	Zinc finger, AN1-type domain 2A
ZNF395	Zinc finger protein 395
ZNF768	Zinc finger protein 768

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