

**Supplemental Table 1. Genes differentially expressed between Oct-1 deficient and wild-type primary MEFs**

Symbol; Gene title	Probeset <sup>†</sup>	Accession	Fold Change	AdjP-value
<i>Stress/oxidative response</i>				
Ifi202b; interferon activated gene 202B <sup>b</sup>	1457666_s_at	AV229143	39.99	<1E-9
Ifi202b; interferon activated gene 202B <sup>b</sup>	1421551_s_at	NM_011940	29.99	<1E-9
Prdx2; peroxiredoxin 2	1430979_a_at	AK011963	10.23	<1E-9
Serping1; serine (or cysteine) proteinase inhibitor, clade G, member 1	1416625_at	NM_009776	4.68	<1E-9
RAD52b	1417661_at	NM_025654	3.56	<1E-9
Gpx3; glutathione peroxidase 3	1449106_at	NM_008161	2.62	3.51E-07
Cdo1; cysteine dioxygenase 1, cytosolic	1448842_at	NM_033037	2.55	8.98E-05
Timp3; tissue inhibitor of metalloproteinase 3	1419089_at	BI111620	2.53	<1E-9
Il-6; interleukin 6	1450297_at	NM_031168	2.48	6.48E-04
Timp3; tissue inhibitor of metalloproteinase 3	1419088_at	BI111620	2.33	5.64E-05
Gbp2; guanylate nucleotide binding protein 2	1418240_at	NM_010260	2.23	1.53E-04
Timp3; tissue inhibitor of metalloproteinase 3	1449334_at	BI111620	2.22	7.23E-06
Timp3; tissue inhibitor of metalloproteinase 3	1449335_at	BI111620	2.18	2.28E-08
Gstk1; glutathione S-transferase kappa 1	1452823_at	AK002661	2.13	1.81E-02
Ndrp4; N-myc downstream regulated gene 4	1436188_a_at	AI837704	2.13	6.34E-06
Gas6; growth arrest specific 6	1417399_at	NM_019521	2.04	1.21E-05
Atm; ataxia telangiectasia mutated	1421205_at	NM_007499	-2.27	8.74E-04
Gas5; growth arrest specific 5	1436222_at	AW547050	-3.52	<1E-9
Gas5; growth arrest specific 5	1424843_a_at	BC004622	-4.36	<1E-9
<i>Chemokine</i>				
Cxcl14; chemokine (C-X-C motif) ligand 14	1418457_at	AF252873	3.08	<1E-9
Cxcl14; chemokine (C-X-C motif) ligand 14	1418456_a_at	AF252873	2.77	5.41E-07
<i>Signal transduction</i>				
Ptpn22; protein tyrosine phosphatase, receptor type, V	1449957_at	NM_007955	4.24	<1E-9
Gpr49; G protein-coupled receptor 49	1450988_at	BB751088	4.14	<1E-9
Rgs4; regulator of G-protein signaling 4	1416286_at	NM_009062	2.96	<1E-9
Calml4; calmodulin-like 4	1424713_at	AY061807	2.87	<1E-9
Wnt4	1450782_at	NM_009523	2.67	3.82E-06
Rgs4; regulator of G-protein signaling 4	1416287_at	NM_009062	2.23	7.43E-04
Pde4b; phosphodiesterase 4B, cAMP specific	1422474_at	BM246564	2.13	8.07E-05
Rpgrip1; retinitis pigmentosa GTPase regulator interacting protein 1	1421144_at	NM_023879	2.03	6.35E-09
Rgs4; regulator of G-protein signaling 4	1448285_at	NM_009062	2.02	3.25E-03
Unc5c; unc-5 homolog C	1419592_at	NM_009472	-2.28	2.72E-03
<i>Transporter/channel proteins</i>				
Fxyd6; FXYD domain-containing ion transport regulator 6	1417343_at	AB032010	6.44	<1E-9
Syt13; synaptotagmin 13	1434470_at	BB244585	2.15	3.61E-03
<i>Structural/extracellular matrix</i>				
Dcn; decorin	1449368_at	NM_007833	4.77	<1E-9
Lama4; laminin, alpha 4	1424808_at	BB053010	2.86	1.83E-03
Lum; lumican (Keratan sulfate proteoglycan lumican)	1423607_at	AK014312	2.60	1.57E-05
Cthrc1; collagen triple helix repeat containing 1	1452968_at	AK003674	2.59	<1E-9
Lama2; laminin, alpha 2	1426285_at	U12147	2.52	2.26E-05
Col8a2; procollagen, type VIII, alpha 2	1434667_at	BG229308	2.36	2.28E-03
Lgals3bp; lectin, galactoside-binding, soluble, 3 binding protein	1448380_at	NM_011150	2.31	1.33E-04
Efs; embryonal Fyn-associated substrate	1416716_at	NM_010112	2.31	2.34E-05
Islr; immunoglobulin superfamily containing leucine-rich repeat	1418450_at	NM_012043	2.15	8.24E-03
Lama4; laminin, alpha 4	1424807_at	BB053010	2.15	1.38E-05
Col10a1; procollagen, type X, alpha 1	1422253_at	NM_009925	-2.02	9.64E-06
Myo10; myosin X	1450651_at	AV297945	-2.14	2.97E-08
Edil3; EGF-like repeats and discordin I-like domains 3	1433474_at	BB377340	-2.09	1.18E-03
Smoc2; SPARC related modular calcium binding 2	1415935_at	NM_022315	-2.13	6.09E-05
Col2a1; procollagen, type II, alpha 1	1450567_a_at	NM_031163	-2.38	4.33E-04
Itih2; inter-alpha trypsin inhibitor, heavy chain 2	1417618_at	NM_010582	-2.41	<1E-9
<i>Transcriptional regulation</i>				
Klf4; Kruppel-like factor 4	1417395_at	BG069413	2.32	1.58E-03
Bcl11b; B-cell leukemia/lymphoma 11B	1450339_a_at	NM_021399	2.26	7.04E-05
Mitc1; MAD homolog 4 interacting transcription coactivator 1	1433606_at	BG069232	2.05	1.44E-02
Trps1; Trichorhinophalangeal syndrome I	1449530_at	NM_032000	-2.09	1.21E-04
Asb5; ankyrin repeat and SOCs box-containing protein 5	1449356_at	NM_029569	-2.31	8.24E-07
Supt16h; suppressor of Ty 16 homolog	1449578_at	AW536705	-2.69	2.94E-07
Tbx4; T-box 4	1426321_at	AY075134	-3.09	<1E-9
<i>Mitochondrial/ATP metabolism</i>				
Abat; 4-aminobutyrate aminotransferase	1433855_at	BF462185	2.61	7.03E-07
Atp10d; ATPase, Class V, type 10D	1436544_at	BB016769	2.36	<1E-9
Coxvib2; cytochrome c oxidase subunit Vib	1435275_at	AV013496	2.09	6.65E-03
Cbr2; carbonyl reductase 2	1418509_at	BC010758	-2.16	2.97E-03
Ampd3; AMP deaminase 3	1422573_at	D85596	-2.32	1.38E-05
Ywhaz; tyr 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta	1416103_at	AV027921	-2.42	2.58E-06
<i>Acetyl CoA/lipid metabolism</i>				
Lipg; lipase, endothelial	1421262_at	BC020991	-2.89	2.64E-04
Pank4; pantothenate kinase 4	1435004_at	BM119773	-4.86	<1E-9
<i>Receptors</i>				
Srpf1; secreted frizzled-related sequence protein 1	1448395_at	BI658627	2.36	5.86E-04
Ly6a; lymphocyte antigen 6 complex, locus A encoding stem cell marker Sca-1	1417185_at	BC002070	2.15	<1E-9
Srpf1; secreted frizzled-related sequence protein 1	1460187_at	BI658627	2.14	3.19E-03
Ednra; endothelin receptor type A	1433525_at	AW558570	2.10	6.83E-03
Pdgfrl; platelet-derived growth factor receptor-like	1428896_at	AK004179	2.05	1.52E-04
Olr1; oxidized low density lipoprotein (lectin-like) receptor 1	1419534_at	NM_138648	2.01	1.43E-02
Ednrb; endothelin receptor type B	1437347_at	BF100813	-2.73	1.72E-04

<i>Angiogenesis</i>					
Ang1; angiogenin, ribonuclease A family, member 1	1438937_x_at	AI385586	2.12	2.08E-03	
<i>Ubiquitination/proteolysis</i>					
Fbxo32; F-box only protein 32	1417522_at	AF441120	2.92	1.64E-06	
Fbxo32; F-box only protein 32	1448747_at	AF441120	2.54	9.12E-07	
Prss19; protease, serine, 19 (neuropsin)	1419722_at	NM_008940	2.09	5.01E-03	
<i>Splicing regulation/RNA binding</i>					
Sfrs14; splicing factor, arginine/serine-rich 14	1435798_a_at	BB772209	2.33	6.99E-05	
Khsrp; KH-type splicing regulatory protein	1428174_x_at	BQ174458	-2.17	4.08E-03	
Elavl2; ELAV (embryonic lethal, abnormal vision)-like 2	1421882_a_at	BB105998	-2.39	4.10E-05	
Khsrp; KH-type splicing regulatory protein	1452690_at	BQ174458	-2.40	2.08E-03	
<i>Sex determination/sex linked</i>					
Ddx3y; DEAD box polypeptide 3, Y-linked	1426438_at	AA210261	153.51	<1E-9	
Eif2s3y; eukaryotic translation initiation factor 2, subunit 3, Y-linked	1417210_at	NM_012011	53.34	<1E-9	
Ddx3y; DEAD box polypeptide 3, Y-linked	1452077_at	AA210261	36.44	<1E-9	
Uty; ubiquitously transcribed tetratricopeptide repeat gene, Y-linked	1426598_at	BB742957	5.55	<1E-9	
Ddx3y; DEAD box polypeptide 3, Y-linked	1426439_at	AA210261	5.20	<1E-9	
Rerg; RAS-like, estrogen-regulated, growth-inhibitor	1451236_at	BC026463	4.80	<1E-9	
Jarid1d; jumonji, AT rich interactive domain 1D (Rbp2 like), Y-linked	1424903_at	AF127244	2.65	<1E-9	
Sepp1; selenoprotein P, plasma, 1	1452141_a_at	BC001991	2.44	3.19E-05	
Uty; ubiquitously transcribed tetratricopeptide repeat gene, Y-linked	1422247_a_at	NM_009484	2.43	1.11E-05	
Eif2s3x; eukaryotic translation initiation factor 2, subunit 3, X-linked	1421895_at	NM_012010	-2.19	4.84E-09	
Xist; inactive X specific transcripts	1427263_at	L04961	-3.81	<1E-9	
Xist; inactive X specific transcripts <sup>b</sup>	1436936_s_at	BG806300	-50.99	<1E-9	
Xist; inactive X specific transcripts	1427262_at	L04961	-60.23	<1E-9	
<i>Methylation</i>					
Ahcy; S-adenosylhomocysteine hydrolase	1417125_at	NM_016661	-6.68	<1E-9	
<i>Growth/insulin</i>					
Igfbp3; insulin-like growth factor binding protein 3	1423062_at	AV175389	5.30	<1E-9	
Igfbp3; insulin-like growth factor binding protein 3 <sup>b</sup>	1458268_s_at	AI649005	5.25	<1E-9	
Nov; neuroblastoma overexpressed gene	1426852_x_at	X96585	2.69	<1E-9	
Igf1; insulin-like growth factor 1	1434413_at	BG092677	2.61	1.58E-04	
Igf1; insulin-like growth factor 1	1437401_at	BG075165	2.30	1.79E-03	
Ghitm; growth hormone inducible transmembrane protein	1415882_at	BC010224	2.24	3.68E-11	
Nov; neuroblastoma overexpressed gene	1426851_a_at	X96585	2.14	7.65E-06	
<i>Other/unknown</i>					
Srpx; sushi-repeat-containing protein (also known as ETX1 and drs-2)	1451939_a_at	AB028050	3.62	5.07E-09	
Hist2h2aa1; histone 2, H2aa1	1418366_at	BC010564	2.20	2.96E-03	
Crip1; cysteine-rich protein 1	1416326_at	NM_007763	2.11	1.64E-05	
Centd2; centaurin, delta 2	1428064_at	BI248650	2.03	2.53E-03	
Ablim1; actin-binding LIM protein 1	1454708_at	BG065289	2.02	5.53E-03	
Rps25; ribosomal protein S25	1430978_at	BM729504	-2.26	4.80E-05	
Limd1; LIM domains containing 1	1422731_at	AK004806	-3.02	6.23E-09	
Rgpr; regucalcin gene promoter region related protein	1450734_at	NM_033354	-3.07	<1E-9	

<sup>a</sup>ESTs omitted

<sup>b</sup>probe sets of the form xxxxxx\_s\_at omitted unless they were validated using RT-PCR or with a second probset