

Supplemental Table 2. Genes differentially expressed between Oct-1 deficient and wild-type primary MEFs in response to 10 Gy gamma radiation

Symbol; Gene title	Probeset [†]	Accession	Fold WTR/WT	AdjP-value	Fold MUR/MU	AdjP-value	Fold MUR/WTR	AdjP-value	Fold MU/WT	AdjP-value	Rank WT,WTR,MU,MUR [‡]
<i>Stress/oxidative response</i>											
Sesn2; sestrin 2	1425139_at	AV308638	1.96	2.29E-03	1.63	0.27	1.04	0.99	1.25	0.99	9433,7042,8664,6933
Sesn2; sestrin 2	1451599_at	AV308638	1.89	1.75E-02	1.37	0.99	-1.12	0.99	1.23	0.99	10113,7936,9436,8378
Sdfr2; stromal cell derived factor receptor 2	1423465_at	BB032852	1.79	4.86E-02	1.09	0.99	-1.75	5.89E-02	-1.06	0.99	12658,11138,12863,12615
Ddit4; DNA-damage-inducible transcript 4	1428306_at	AK017926	1.73	8.71E-03	1.48	0.52	1.11	0.99	1.30	0.59	4972,3301,4100,3098
Bbc3; Bcl-2 binding component 3	1423315_at	AW489168	1.72	2.85E-02	1.44	0.96	-1.18	0.99	1.01	0.99	8741,6780,8712,7427
Icam1; intercellular adhesion molecule-1	1424067_at	BC008626	1.64	8.42E-05	6.24	<1E-9	4.11	<1E-9	1.08	0.99	19383,16809,19072,12583
Homer3; homer homolog 3	1424859_at	BC005773	1.57	0.26	1.76	1.40E-02	1.10	0.99	-1.03	0.99	8645,7023,8730,6719
Daf1; decay accelerating factor 1	1443906_at	BE686894	1.54	3.25E-02	1.50	0.99	1.69	1.45E-02	1.73	3.48E-04	7091,5401,4959,3865
Prkaa2; protein kinase, AMP-activated, alpha 2 catalytic subunit	1434766_at	BQ175911	1.48	6.67E-08	1.09	0.99	-1.37	2.34E-05	-1.00	0.99	14476,10813,14580,13900
Tnfrsf10b; tumor necrosis factor receptor superfamily, member 10b	1421296_at	NM_020275	1.46	0.99	2.03	4.75E-03	-1.21	0.99	-1.68	7.78E-03	14962,13936,17023,14476
Ccng1; cyclin G1	1420827_a_at	BG065754	1.45	3.60E-03	1.23	0.99	-1.07	0.99	1.10	0.99	786,528,726,576
Prkaa2; protein kinase, AMP-activated, alpha 2 catalytic subunit	1429463_at	BB612385	1.42	<1E-9	1.10	0.24	-1.30	<1E-9	1.00	0.99	21376,18687,21380,20908
Nxn; nucleoredoxin	1422465_a_at	BB366804	1.29	0.76	1.42	4.63E-02	1.17	0.99	1.06	0.99	2272,1839,2180,1619
Cox10; cytochrome c oxidase assemb.											
Protein 10, heme A farnesyltransferase	1429329_at	AK010385	1.22	0.99	-1.67	0.31	-1.81	1.60E-02	1.13	0.99	5262,4656,4823,6787
Ptges; prostaglandin E synthase	1439747_at	BB730139	1.06	0.99	1.34	3.03E-04	1.28	2.79E-04	1.01	0.99	16767,16116,16688,13925
Gstm4; glutathione S-transferase mu 4	1424835_at	AF464943	1.03	0.99	1.55	5.14E-02	1.76	2.78E-04	1.17	0.99	19755,19589,18937,16661
Tnfrsf14; tumor necrosis factor receptor superfamily, member 14	1452425_at	BC022125	-1.03	0.99	1.40	1.23E-04	1.43	9.25E-06	-1.01	0.99	21060,21204,21166,19309
H2afx; H2A histone family, member X	1416746_at	NM_010436	-1.54	8.04E-03	-1.33	0.44	1.14	0.99	-1.01	0.99	1483,2200,1507,1978
<i>Signal Transduction</i>											
Rab40c, member RAS oncogene family	1424332_at	AF422144	1.90	8.04E-03	1.79	0.82	1.08	0.99	1.15	0.51	13076,11399,12760,11220
Ulk1; Unc-51 like kinase 1	1448370_at	AF072370	1.65	0.34	1.96	5.85E-03	1.11	0.99	-1.07	0.99	9487,7752,9720,7374
Pde8a; phosphodiesterase 8A	1418407_at	BB220000	1.34	1.37E-02	1.07	0.99	-1.35	2.74E-02	-1.08	0.99	19113,17544,19626,19170
Rapgef3; Rap guanine nucleotide exchange factor (GEF) 3	1424470_a_at	BC020532	1.18	0.99	1.82	4.25E-02	1.32	0.99	-1.17	0.99	13631,13174,14067,12504
Inpp5f; inositol polyphosphate-5-phosphatase F	1442100_at	BB619843	-1.04	0.99	1.48	2.59E-04	1.40	6.23E-06	-1.10	0.99	9731,10042,10582,7990
Rerg; RAS-like, estrogen-regulated, growth-inhibitor	1451236_at	BC026463	-1.16	0.99	-1.81	4.77E-03	3.08	<1E-9	4.80	<1E-9	16032,16647,11719,13211
Ppp1cb; protein phosphatase 1, catalytic subunit, beta isoform	1433540_x_at	AW823525	-1.26	0.56	-1.44	2.13E-03	-1.18	0.58	-1.04	0.99	842,1091,876,1292
Prkg2; protein kinase, cGMP-dependent, type II	1435162_at	BB823350	-1.30	0.72	-1.54	2.85E-02	-1.32	0.65	-1.11	0.99	2781,3400,3033,4223
Calmbp1; calmodulin binding protein 1	1452459_at	BB648052	-1.46	6.17E-03	-1.32	0.88	-1.04	0.99	-1.14	0.99	16613,18488,17342,18694
Rab1; RAB1, member RAS oncogene family	1436034_at	AW550283	-1.69	1.76E-02	-1.19	0.99	1.13	0.99	-1.26	0.99	12946,14276,13586,13989
Calmbp1; calmodulin binding protein 1	1458560_at	BB825704	-1.77	5.19E-08	-1.62	0.99	-1.09	0.99	2.57E-02	0.99	7858,12021,8982,13125
Calmbp1; calmodulin binding protein 1	1441520_at	BB478135	-2.52	<1E-9	-1.43	0.87	1.05	0.99	-1.68	<1E-9	9817,18424,14527,18170
<i>Transporter/channel proteins</i>											
Pr1; protein distantly related to the gamma subunit family	1417611_at	BC024613	1.39	0.68	1.64	1.20E-02	1.76	1.35E-03	1.50	0.16	6629,5401,5157,3597
Slc38a2; solute carrier family 38, member 2	1426722_at	BM248527	-1.29	0.99	-1.45	4.36E-02	-1.08	0.99	1.04	0.99	1129,1468,1065,1600
<i>Structural/extracellular matrix</i>											
Myo10; myosin X	1450651_at	AV297945	-1.55	2.35E-02	1.11	0.99	-1.25	0.17	-2.14	2.97E-08	13846,15065,16314,15855
<i>Transcriptional regulation</i>											
Klf4; Kruppel-like factor 4	1417395_at	BG069413	2.34	2.93E-03	1.52	0.51	1.51	0.45	2.32	1.58E-03	12982,10733,10771,9523
Sfmbt1; Scm-like with four mbt domains 1	1422893_at	AV214764	2.05	3.75E-03	1.60	0.38	-1.17	0.99	1.09	0.99	11850,9781,11643,10302
Notch1; Notch homolog protein 1	1418633_at	NM_008714	1.29	0.99	1.99	3.64E-03	1.26	0.99	-1.23	0.99	10555,9795,11174,9067
Zfp423; zinc finger protein 423	1419380_at	NM_033327	1.06	0.99	1.50	4.95E-02	1.48	6.84E-02	1.05	0.99	17772,17488,17675,15847
Prrx1; paired related homeobox 1 (PRX-1)	1432129_a_at	AK008112	-1.13	0.99	-1.51	2.90E-02	-1.15	0.54	1.16	0.99	4377,4818,3937,5342
Idb2; inhibitor of DNA binding 2	1435176_a_at	BF019883	-1.26	0.99	-1.61	3.14E-03	1.00	0.99	1.28	0.61	2235,2731,1809,2737
Tmpo; thymopoietin	1452036_a_at	AA153892	-1.41	0.48	-1.47	4.63E-02	-1.09	0.99	-1.05	0.99	2069,2800,2177,3017
Tbx15; T-box 15	1418755_at	NM_009323	-1.48	0.37	-1.62	2.41E-02	1.06	0.99	1.16	0.99	5028,6468,4543,6302

Suv39h2; suppressor of variegation 3-9 homolog 2	1422979_at	NM_022724	-1.49	0.14	-2.08	3.29E-05	-1.38	0.43	1.02	0.99	14030,15149,14033,16335
Zfp318; zinc finger protein 318	1421478_a_at	NM_021346	-1.50	1.51E-03	-1.06	0.99	1.03	0.99	-1.37	0.12	16391,18326,17986,18169
Mef2c; myocyte enhancer factor 2C	1421027_a_at	AI595932	-1.61	2.18E-03	-1.09	0.99	1.66	1.08E-03	1.13	0.99	14851,16566,14599,14807
Zfh4; zinc finger homeodomain 4	1437556_at	BF147593	-1.78	7.17E-02	-1.65	4.18E-03	1.23	0.99	1.14	0.99	640,1287,537,963
<i>Structural/extracellular matrix</i>											
Abli1; actin-binding LIM protein 1	1454708_at	BG065289	1.81	4.26E-02	1.37	0.99	1.53	0.72	2.02	5.53E-03	12503,10932,10654,9688
Dmn; desmuslin	1457275_at	AI594683	1.59	0.55	2.00	2.47E-02	-1.42	0.99	-1.78	0.37	2632,1935,3768,2419
Eva; epithelial V-like antigen	1416236_a_at	BC015076	1.57	1.95E-02	-1.01	0.99	-1.69	1.78E-02	-1.07	0.99	15762,14354,16115,16076
Nup188; nucleoporin 188	1442314_at	BB380041	1.39	4.96E-02	1.09	0.99	-1.54	2.04E-02	-1.21	0.99	8228,6463,9541,9041
Efs; embryonal Fyn-associated substrate	1438114_x_at	BB168690	1.35	0.99	1.85	6.82E-03	1.66	8.46E-02	1.21	0.99	15010,14139,14566,12901
Gne; glucosamine	1455583_at	AV371374	1.25	0.99	1.73	6.18E-03	1.34	0.99	-1.04	0.99	7005,6051,7212,5090
<i>Mitochondrial/ATP metabolism</i>											
Mtus1; mitochondrial tumor suppressor 1	1436502_at	BB747681	2.07	4.10E-03	1.66	0.40	-1.42	0.98	-1.14	0.99	5208,3318,5618,4101
Abcb1b; ATP-binding cassette, sub-family B (MDR/TAP), member 1B	1418872_at	NM_0111075	1.94	1.67E-02	1.39	0.99	-1.79	6.84E-02	-1.29	0.99	9547,7216,10370,9330
Gfer; growth factor, erv1-like (augmenter of liver regeneration)	1426995_a_at	BI901126	1.52	0.48	1.72	4.74E-02	1.16	0.99	1.03	0.99	7207,5650,7131,5164
Atp11c; Atpase, class VI, type 11C	1442367_at	BB184010	1.42	5.51E-02	1.12	0.99	-1.56	8.01E-03	-1.25	0.99	6984,5591,8300,7724
Oxct1; 3-oxoacid CoA transferase 1	1436750_a_at	AV213379	-1.11	0.99	-1.53	2.39E-02	-1.29	0.40	1.07	0.99	2769,3019,2650,3663
<i>Acetyl CoA/lipid metabolism</i>											
Acad8; acyl-Coenzyme A dehydrogenase family, member 8	1419261_at	BB223744	1.51	0.76	1.95	1.95E-02	1.13	0.99	-1.14	0.99	13176,12117,13562,11841
Pltp; phospholipid transfer protein	1417963_at	NM_011125	1.47	0.99	2.2	9.78E-03	1.61	0.54	1.09	0.99	13160,12175,12981,10920
Acsl4; acyl-CoA synthetase long-chain family member 4	1433531_at	BQ174545	-1.28	0.99	-1.47	2.40E-02	-1.04	0.99	1.10	0.99	2935,3527,2723,3655
<i>Receptors</i>											
Npr2; natriuretic peptide receptor 2	1427191_at	AW558468	1.53	0.94	1.62	2.02E-02	1.18	0.99	1.11	0.99	9306,7833,8947,7260
Gpr64; G protein-coupled receptor 64	1438350_at	BM234984	1.47	2.47E-07	1.20	0.99	-1.45	2.63E-09	-1.19	0.54	14964,11265,16737,15055
Il1rl1; interleukin 1 receptor-like 1	1425145_at	D13695	1.47	6.90E-02	1.29	0.99	-1.64	2.87E-03	-1.44	0.55	3243,2425,4317,3579
Npr1; natriuretic peptide receptor 1	1449160_at	J05504	1.45	1.69E-03	-1.07	0.99	-1.36	8.57E-02	1.14	0.99	19762,17703,19136,19374
Bmpr1b; bone morphogenetic protein receptor, type 1B	1437312_at	BB698679	1.00	0.99	-1.42	0.99	-2.46	1.51E-06	-1.74	1.25E-02	4440,4466,6242,8153
Ptprv; protein tyrosine phosphatase, receptor type, V	1449957_at	NM_007955	1.13	0.99	2.68	5.00E-06	10.02	<1E-9	4.24	<1E-9	13927,13637,10101,6660
Npr3; natriuretic peptide receptor 3	1450286_at	NM_008728	-1.35	8.04E-03	-1.08	0.99	1.10	0.99	-1.13	0.45	16556,17968,17178,17488
Pdgfrb; platelet derived growth factor receptor, beta polypeptide	1436970_a_at	AA499047	-1.43	0.74	-1.53	4.95E-02	1.25	0.99	1.33	0.32	2002,2750,1558,2282
<i>Signalling molecules</i>											
Efna3; ephrin A3	1431170_at	AA388313	1.57	0.76	2.01	1.33E-02	1.35	0.99	1.05	0.99	11069,9735,10972,8733
<i>Metabolic</i>											
Prps2; phosphoribosyl pyrophosphate synthetase 2	1454843_at	BM934034	1.75	1.15E-02	1.61	0.58	-1.33	0.99	-1.22	0.99	719,398,861,521
Oazin; ornithine decarboxylase antizyme inhibitor	1430984_at	BI155585	-1.12	0.99	-1.34	4.45E-02	-1.21	0.21	-1.01	0.99	7544,8224,7668,9664
Idi1; isopentenyl-diphosphate delta isomerase	1423804_a_at	BC004801	-1.30	0.99	-1.57	2.40E-02	-1.12	0.99	1.08	0.99	4722,5666,4466,6091
<i>Ubiquitination/proteolysis</i>											
Psmb8; proteasome (prosome, macropain) subunit, beta type 8	1422962_a_at	NM_010724	1.56	1.75E-05	1.22	0.99	1.49	0.94	1.90	2.85E-06	18235,16175,15514,14854
Ctsf; cathepsin F	1451019_at	AK017474	1.37	0.99	1.99	4.54E-02	1.65	0.24	1.14	0.99	13374,12572,13092,11320
Znrf2; zinc finger/RING finger 2	1444735_at	BM221751	-1.33	1.03E-03	-1.13	0.99	-1.05	0.99	-1.24	4.21E-03	12025,14788,14130,15497
Adamts1; reprolysin type disintegrin-like metalloprotease with thrombospondin type 1 motif	1450716_at	D67076	-1.52	8.97E-02	-1.3	0.59	1.56	3.04E-02	1.37	0.40	2542,3534,1959,2544
<i>Splicing regulation/RNA binding</i>											
Hnrpk; heterogeneous nuclear ribonucleoprotein K	1460547_a_at	BB722680	-1.24	0.99	-1.34	2.36E-02	-1.11	0.99	-1.03	0.99	217,292,237,335
Syncrip; synaptotagmin binding,	1426402_at	BB469322	-1.31	0.75	-1.37	3.34E-02	-1.16	0.99	-1.11	0.99	1344,1755,1484,2009

cytoplasmic RNA interacting protein Rbm3; RNA binding motif protein 3	1429169_at	AK011224	-1.49	0.99	-1.65	2.11E-03	-1.91	6.73E-06	-1.72	0.88	3969,5145,5588,7999	
<i>Cell cycle/sister chromatid cohesion</i>												
Cdk12; cyclin-dependent kinase-like 2 (CDC2-related kinase)	1449229_a_at	NM_016912	1.06	0.99	1.36	6.57E-02	1.32	3.42E-02	1.03	0.99	19831,19479,19771,17953	
Sgol1; shugoshin-like 1	1439510_at	BB410537	-1.49	0.51	-1.97	2.02E-02	-1.56	0.20	-1.18	0.99	4150,5367,4583,7212	
Mphosph1; M-phase phosphoprotein 1	1440924_at	BM239553	-1.62	1.24E-02	-1.59	0.31	-1.26	0.99	-1.28	0.99	4817,6505,5598,7831	
Sgol2; shugoshin-like 2	1437370_at	AV316937	-1.65	0.55	-2.01	4.46E-02	-1.33	0.99	-1.09	0.99	1625,2448,1695,2899	
<i>Other/unknown</i>												
Mpp7; membrane protein, palmitoylated 7 (MAGUK p55 subfamily member 7)	1454158_at	AK012883	2.07	1.48E-02	1.55	0.37	-1.30	0.99	1.03	0.99	4807,3108,4667,3566	
Wdr35; WD repeat domain 35	1440318_at	BB475816	1.90	0.31	1.91	4.57E-03	-1.41	0.51	-1.41	6.63E-02	6233,4242,8027,5228	
Tmem19; transmembrane protein 19	1443049_at	BB199824	1.82	<1E-9	1.46	<1E-9	-1.20	1.68E-05	1.04	0.99	20980,15628,20756,17594	
Thap6; THAP domain containing 6	1456536_at	BB183222	1.81	4.10E-04	1.13	0.99	-1.25	0.99	1.27	0.99	9894,6411,8324,7688	
Sec8l1; SEC8-like 1	1453977_at	AK014499	1.77	7.82E-03	1.07	0.99	-1.60	9.99E-03	1.03	0.99	16780,14744,16752,16413	
Bsc12; Bernardinelli-Seip congenital lipodystrophy 2	1420632_a_at	AF069954	1.63	9.84E-03	1.37	0.80	-1.15	0.99	1.02	0.99	16217,14587,16222,15045	
Fbxo2; F-box only protein 2	1427004_at	BB311718	1.56	1.67E-05	1.22	0.99	-2.01	<1E-9	-1.58	8.24E-03	18250,16202,20836,19709	
Rchy1; ring finger and CHY zinc finger domain containing 1	1432144_a_at	AK015870	1.55	3.81E-03	1.33	0.92	-1.02	0.99	1.15	0.99	3643,2612,3283,2683	
Hook3; hook homolog 3	1443857_at	BB825115	1.49	0.99	-1.11	0.99	-1.92	1.34E-03	-1.15	0.99	5061,3950,5457,5941	
Cobl1; Cobl-like 1	1454795_at	AV080881	1.47	2.55E-02	1.57	0.35	-1.29	0.67	-1.38	0.99	229,139,367,194	
Dixdc1; DIX domain containing 1	1444395_at	AW455436	1.45	1.08E-05	1.11	0.99	-1.41	3.38E-04	-1.08	0.99	16324,12585,17186,16241	
Rps6ka5; ribosomal protein S6 kinase, polypeptide 5	1440343_at	BQ174267	1.34	3.90E-04	1.45	0.31	1.14	0.99	1.05	0.99	15044,12115,14610,11255	
Fln29; FLN29 gene product	1428346_at	AK003586	1.30	0.99	1.79	3.54E-02	1.39	0.59	1.01	0.99	10234,9420,10231,8278	
Trim16; tripartite motif protein 16	1460629_at	BB033733	1.10	0.99	1.86	2.68E-02	3.31	2.21E-09	1.95	1.92E-02	13556,13311,11896,10111	
Syt11; synaptotagmin 11	1455176_a_at	BF457392	-1.11	0.99	-1.59	1.15E-02	1.02	0.99	1.46	1.69E-02	18287,18866,16591,18803	
Dlg7; discs, large homolog 7	1438811_at	BB132734	-1.28	0.99	-1.69	1.93E-02	1.21	0.99	1.60	9.77E-02	5624,6581,4134,5889	
Tert; telomerase reverse transcriptase	1450254_at	NM_009354	-1.34	8.09E-03	-1.28	0.76	1.07	0.99	1.02	0.99	17587,19186,17602,18826	
Nptx1; neuronal pentraxin 1	1434877_at	AI152800	-1.35	2.23E-02	-1.22	0.99	-1.10	0.99	-1.22	0.22	16592,18028,17647,18567	
Prdm16; PR domain containing 16	1440870_at	BB356786	-1.47	<1E-9	-1.01	0.99	1.00	0.99	-1.45	4.76E-09	14186,17946,17935,18132	
Tbc1d1; TBC1 domain family, member 1	1419448_at	BB501891	-1.65	1.97E-03	-1.24	0.99	1.00	0.99	-1.33	0.26	14795,16597,15822,16589	

ESTs omitted

¹probe sets of the form xxxxxx_s_at omitted, unless they were validated using RT-PCR or were verified with a second probset

²numerical rank based on average expression on MOE430A chip (1-22626) or B chip (1-22511) from 4 replicates, 1 being most highly expressed