Table 2. Genes down-regulated in *Parp-1*$^{-/-}$ ES cells

Accession No.	Fold change[a] W vs H	J1 vs 210-58	J1 vs 226-47	Symbol	Chromosome	Gene description
Cell cycle/cell proliferation/cell death						
AW122355	3.2	5.2	2.3	*Prkcbp1*	2	Protein kinase C binding protein 1
AF067395	2.9	2.9	2.9	*Bnip3l*	14	BCL2/adenovirus E1B 19kDa-interacting protein
AI842277	2.7	2.3	3.2	*Igfbp3*	11	Insulin-like growth factor binding protein 3
U95826	2.2	2.5	1.9	*Ccng2*	5	Cyclin G2
Cell structure/cell adhesion						
U16741	4.1	6.3	3.1	*Capza2*	6	Capping protein (actin filament) muscle Z-line, alpha 2
AI132380	3.6	3.1	4.3	*Fndc3a*	14	Fibronectin type III domain containing 3a
AI505453	2.9	2.5	3.4	*Myh9*	15	Myosin, heavy polypeptide 9, non-muscle
AW208938	2.4	3.2	2.0	*Pkp2*	16	Plakophilin 2
M76124	2.4	2.2	2.6	*Tacstd1*	17	Tumor-associated calcium signal transducer 1
Metabolism						
U73820	5.5	5.2	5.8	*Galnt1*	18	Polypeptide GalNAc transferase-T1 (ppGaNTase-T1)
AI841270	3.4	2.4	6.4	*Gstm1*	3	Glutathione S-transferase, mu1
AV308550	2.6	4.1	1.9	*Piga*	x	Phosphatidylinostitol glycan, class A
AI851912	2.3	2.2	2.5	*Rps27*	3	Ribosomal protein S27
AI852144	2.1	2.9	1.7	*Pbef-pending*	12	Pre-B-cell colony-enhancing factor
U65986	2.1	1.9	2.5	*Anxa11*	14	Annexin A11
D50264	2.1	1.4	4.1	*Pigf*	17	Phosphatidylinositol glycan, class F
AF031486	2.0	2.0	2.0	*Sms*	x	Spermidine synthase
AI845882	2.0	2.5	1.7	*Acyp1*	12	Acylphosphatase1, erythrocyte (common) type
Protein biosynthesis/degradation						
AI852581	3.0	3.0	3.1	*Ide*	19	Insulin degradating enzyme
AI414051	3.0	1.8	9.1	*Usp24*	4	Ubiquitin specific protease 24
AW121012	2.9	2.8	2.8	*Rnf19*	15	Ring finger protein 19
X92665	2.9	2.5	3.4	*Ube2e1*	14	Ubiquitin-conjugating enzyme UbcM3
AW048882	2.2	2.8	1.8	*Iars*	13	Isoleucine-tRNA synthetase
AA867340	2.2	1.9	2.6	*Psme4*	11	Proteasome (prosome, macropain) activator subunit
AB024427	2.2	2.3	2.1	*Rnf11*	4	Ring finger protein 11
Signaling						
AI846023	4.6	2.8	13.1	*Arl7*	1	ADP-ribosylation factor-like 7
AA260005	2.8	2.7	2.8	*Pawr*	10	PPKC, apoptosis, WT1, regulator
AI317205	2.6	2.4	2.7	*Map3k1*	13	Mitogen activated protein kinase kinase kinase 1
AF035644	2.3	2.0	2.7	*Ptp4a2*	4	Protein tyrosine phosphatase 4a2
M21019	2.3	1.9	2.9	*Rras*	7	Harvey rat sarcoma oncogene, subgroup R
AI194248	2.2	2.5	1.9	*Csnk2a1*	2	Casein kinase II, alpha 1 polypeptide
AI854006	2.0	2.0	2.1	*Set*	2	SET translocation
D83921	2.0	1.9	2.1	*Ebaf*	1	Endometrial bleeding associated factor
Transcription/replication						
X14206	9.9	8.4	12.0	*Adprt1*	1	Poly(ADP-ribose) polymerase 1
M99167	3.0	6.2	2.0	*Hnrpa1*	15	Heterogeneous nuclear ribonucleoprotein A1
AW107922	2.8	3.7	2.2	*Sox11*	12	SRY-containing gene 11
AI849135	2.5	2.5	2.5	*Foxo3a*	10	Forkhead box 03a
Y07836	2.5	2.3	2.8	*Bhlhb2*	6	Basic-helix-loop-helix domain containing, class B2
X74760	2.5	2.3	2.7	*Notch3*	17	Notch gene homolog 3, (Drosophila)
AI447783	2.1	2.4	1.9	*Helb*	10	Helicase (DNA) B
X94694	2.1	2.7	1.7	*Tcfap2c*	2	Transcription factor AP-2, gamma
AF077861	2.1	2.2	2.1	*Id2*	12	Inhibitor of DNA binding 2
AI605405	2.0	1.9	2.2	*Phf13*	4	PHD finger protein 13
D78382	2.0	1.7	2.6	*Tob1*	11	Transducer of ErbB2.1
Transport						
AV356315	4.1	5.5	3.3	*Lman1*	18	Lectin, mannose-binding, 1
AV298789	2.9	2.6	3.2	*Ranbp5*	14	Ran binding protein 5
D88315	2.2	2.2	2.2	*Hiat1*	3	Hippocampus abundant gene transcript 1
Unknown						
AI845617	3.5	3.5	3.4	*2610019A05Rik*	11	Hypothetical protein
AI852287	3.2	3.3	3.2	*Ankrd28*	14	Ankyrin repeat domain 28
AI836771	3.0	2.8	3.3	*2900008M13Rik*	15	Unknown EST
AA684456	2.9	2.1	4.5	*2310015N07Rik*	7	Hypothetical protein
AI848435	2.8	1.9	4.8	*C78339*	13	Unknown EST
AW123157	2.7	2.5	3.1	*1700051E09Rik*	11	Hypothetical protein
AW124843	2.6	3.1	2.3	*C85108*	4	Unknown EST
AA710439	2.6	2.0	3.6	*6230421P05Rik*	16	Unknown EST
AI853444	2.5	1.8	3.9	*2610042L04Rik*	14	Hypothetical protein
AI853444	2.2	2.1	2.3	*2610042L04Rik*	14	Hypothetical protein
AW121353	2.1	1.6	3.1	*Lrrc8*	2	Luecine rich repeat containing 8
AI037493	2.1	1.5	3.4	*Tbc1d15*	10	TBC1 domain family, member 15
AI461803	2.1	2.2	1.9	*1300006C19Rik*	9	Hypothetical protein
AW049969	2.0	2.0	2.1	*C330005L02Rik*	9	Hypothetical protein
AI847483	2.0	2.0	2.0	*Tmem41b*	7	Transmembrane protein 41B

[a] W, wild-type cells (J1); H, *Parp-1*$^{-/-}$ ES cells (210-58 and 226-47).