

Supplemental Table 1 Genes with altered expression in MPS VII mice

The Table shows genes for which the expression was altered either up or down 2-fold or more at 2 or 5 months of age in MPS VII mice compared with wild-type mice. ‘♣’ represents a change upwards of 2-fold or more at 2 months; ‘♠’, down 2-fold or more at 2 months; ‘♥’, up 2-fold or more at 5 months; ‘♣’, down 2-fold or more at 5 months. In groups ♣ and ♠, only genes determined to be present ($P < 0.04$) are presented in each category; however, the status of the transcript may be different in other columns (i.e. 2 months MPS VII ERT, 5 months MPS VII and 5 months MPS VII ERT). In groups ♥ and ♣, only genes determined to be present ($P < 0.04$) are presented in each category; however, the status of the transcript may be different in other columns (i.e. 2 months MPS VII, 2 months MPS VII ERT and 5 months MPS VII ERT). Values reported are fold increases (↑) or decreases (↓) in comparison with wild-type mRNA levels. NC, no change in expression levels compared with wild-type; det., mRNA was detected in the experimental group (MPS VII or MPS VII ERT), but undetectable in the wild-type group at that time point; n.d., mRNA was not detected.

Accession no./gene name	Age (months)...	Mouse			
		MPS VII 2	MPS VII ERT	MPS VII 5	MPS VII ERT
♣:					
Metallothionein 1		↑3.5	↑3.7	↑3.2	↑3.0
Cyp4a14		↑3.2	↑3.0	NC	NC
AW122893		↑2.6	↑2.5	↑3.5	↑2.8
Metallothionein 2		↑2.6	↑3.2	↑2.5	↑2.5
IGFBP2		↑2.5	↑2.5	↑1.5	↑2.1
Gadd45g		↑2.5	↑2.0	↑2.0	↑1.6
Ly6A/E		↑2.3	NC	↑1.6	NC
Chp-pending(P22)		↑2.3	↑2.8	det.	det.
Mafb		↑2.1	NC	det.	det.
AW212475		↑2.0	↑1.6	↑1.7	↑1.6
IGFBP1		↑2.0	↓1.9	↑1.7	↑3.0
♠:					
SAA-2		↓3.5	↓7.5	NC	↑1.4

β1-Globin	↓3.5	NC	NC	NC
SAA-1	↓3.0	↓3.5	↓1.9	NC
AI645694	↓3.0	↓1.7	NC	NC
Haemoglobin, β-adult	↓2.5	NC	NC	NC
AI593759	↓2.5	↓2.1	↓1.5	NC
Actin, γ2	↓2.3	NC	n.d.§	NC
Malic enzyme	↓2.1	↓2.3	NC	NC
Vanin-1	↓2.1	NC	↓2.5	NC
Haemoglobin, α-adult	↓2.1	NC	NC	NC
AW124226	↓2.0	NC	NC	NC
Mrpl36	↓2.0	NC	n.d.	NC
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♥:				
Glutathione peroxidase 3	n.d.	n.d.	↑4.6	n.d.
Fdps/Fpps	↑1.4	↓1.6	↑4.6	↑2.1
AA716963/IPP isomerase	↑1.3	↓1.7	↑4.3	↑3.5
Rgs16	↑1.7	NC	↑4.3	NC
AW045533/Fdps/Fpps	NC	↓1.7	↑4.0	↑2.0
AW122893	↑2.6	↑2.5	↑3.5	↑2.8
VCAM 1	det.	det.	↑3.2	↑3.2
Metallothionein 1	↑3.5	↑3.7	↑3.2	↑3.0
Sap	NC	NC	↑3.2	↑2.8
AV349152	NC	NC	↑3.0	NC
AI845584/MKP-3/Dusp6 NC	↓1.4	↑2.8	↑2.3	
Aquaporin 1	n.d.	n.d.	↑2.8	↑1.9
X61940/MKP-1/Dusp1	↑1.4	NC	↑2.8	↑1.9
AI848668/Sc4mol	↑1.5	↓1.5	↑2.8	↑3.5
Ptp4a1	NC	↑1.3	↑2.6	↑3.2
Sc5d	NC	NC	↑2.6	NC
AF077861	↓1.9	↑1.7	↑2.5	↑1.7
AW121568	NC	NC	↑2.5	↑3.0

CDC10/Septin7	NC	NC	↑2.5	↑2.6
Ghr	↑1.7	NC	↑2.5	NC
ApoA-IV	↓1.9	↓1.4	↑2.5	NC
RhoB	NC	NC	↑2.5	NC
Metallothionein 2	↑2.6	↑3.2	↑2.5	↑2.5
AI848868	NC	NC	↑2.5	↑2.8
AI852098	NC	↓1.2	↑2.3	NC
AI850801	NC	NC	↑2.3	↑2.3
Rbm3	NC	NC	↑2.3	↑2.1
AW122933	NC	↑1.3	↑2.3	↑2.6
AW046181/Sgk1	NC	↓2.1	↑2.3	↑2.5
Cappa2	NC	NC	↑2.3	NC
Y15003/GM ₃ synthase	NC	↑1.3	↑2.3	↑1.4
Tieg	NC	↑2.0	↑2.3	NC
HRS	NC	↑1.5	↑2.3	↑2.1
AI747194/Lamp2b	NC	NC	↑2.3	↑2.3
Hamp	↑1.6	↑1.1	↑2.3	↑2.1
AI848671	NC	NC	↑2.1	↑2.1
Rnp24-pending	↑1.4	↑1.3	↑2.1	NC
Fkbp5	NC	↑1.7	↑2.1	NC
AA823202	NC	NC	↑2.1	↑2.0
Angiogenin	↑1.7	↑1.5	↑2.1	↑2.5
AI117157	↑1.5	NC	↑2.1	NC
Sp3	NC	NC	↑2.1	↑2.1
Pklr	↓1.4	NC	↑2.1	NC
H3f3b	NC	↑1.2	↑2.1	NC
AI853364/D5D	NC	NC	↑2.1	↑1.7
Lgmn	NC	NC	↑2.0	↑1.6
AI840643	NC	NC	↑2.0	↑2.3
AW124932/Hmgcs1	NC	↓1.9	↑2.0	NC

AI117848	NC	NC	↑2.0	↑2.8
AI047331	NC	NC	↑2.0	↑2.0
AW106745/Nsdhl	↑1.4	↓1.2	↑2.0	NC
AB030505	NC	↓1.5	↑2.0	NC
Ddx3	NC	NC	↑2.0	↑2.1
Gadd45g	↑2.5	↑2.0	↑2.0	↑1.6
AA619207/ACS4	NC	NC	↑2.0	↑3.5
Cdh2/N-cadherin	NC	NC	↑2.0	↑3.2
AW047728	NC	↑1.2	↑2.0	↑2.1
Bhlhb2	NC	NC	↑2.0	↑1.4
AI845514/ABCA1	↓1.2	NC	↑2.0	↑2.5
AI645561	NC	NC	↑2.0	↑1.6
Myosin I/Myo1b	NC	NC	↑2.0	↑1.7
Tcf12	n.d.	NC	↑2.0	↑2.5
Thra	NC	↑1.6	↑2.0	↑2.5
Cish2/Socs2	NC	↑2.5	↑2.0	n.d.
AL021127/Nsdhl	NC	↓1.5	↑2.0	NC
X16672	NC	↓1.2	↑2.0	↑2.0
AW209004	NC	NC	↑2.0	NC
AW047343	NC	NC	↑2.0	↑2.0
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♠:				
Vanin-1	↓2.1	NC	↓2.5	NC
AV207739	NC	NC	↓2.3	n.d.
Hsp105	NC	NC	↓2.1	↑1.7
Gsta2	NC	NC	↓2.1	NC
AI553401	NC	NC	↓2.1	↑1.2
Ephx1	↓1.9	NC	↓2.0	NC
Gnao	n.d.	n.d.	↓2.0	n.d.
Abcg2	↓1.5	NC	↓2.0	NC
