

Table 6. Genes up-regulated in HSC

Category	Genes
Transcription factors (5)	Gata2; Hoxa7; Jun; Nmyc1; Nr4a1
Membrane associated (14)	Chrnb1; Emcn; Eng; F2rl3; Flt3; F2r; Gpr56; Kit; Ly64; Mfng; Mpl; Procr; Rga; Tnfrsf7
Signal transduction (9)	Eng*; F2rl3*; Flt3*; F2r*; Gpr56*; Iigp; Kit*; Rasd1; Socs2
Others (29)	Atp6v1f; C1r; Csad; Ctna2b; Eprs; Eya2; Hspa1a; Ipo4; Itsn; Mbdin; Mcolin2; Mllt3; Ptov1; Pura; Rex3; Rpl36; Sds-rs1; Serpina3g; Ski; Surf2; Taf1c; Tal1; Tbxas1; Tgtp; Vwf; Wbp5; Zfp1; Zfp64; Zfp68
Uncharacterized genes (18)	0610010E21Rik; 0610011I04Rik; 1110001H19Rik; 1190017O12Rik; 1300004C08Rik; 1300017K07Rik; 1700017B05Rik; 1810009M01Rik; 2210023F24Rik; 2410004N09Rik; 2410012M04Rik; 2610002J02Rik; 2610019E17Rik; 2700018N07Rik; 4930415K17Rik; 9130009C22Rik; 9130423L19Rik; LOC232560

Genes have at least 2-fold up-regulation in HSC populations detected in all three data sets [Lemishka and coworkers (1), Melton and coworkers (2), and this study).

*, membrane-associated signal transduction molecules.

Atp6v1f, ATPase, H⁺ transporting, V1 subunit F; C1r, complement component 1, r subcomponent; Chrnb1, cholinergic receptor, nicotinic, β polypeptide 1 (muscle); Csad, cysteine sulfenic acid decarboxylase; Ctna2b, cytotoxic T lymphocyte-associated protein 2 β; Emcn, endomucin; Eng, endoglin; Eprs, glutamyl-prolyl-tRNA synthetase; Eya2, eyes absent 2 homolog (*Drosophila*); F2r, coagulation factor II (thrombin) receptor; F2rl3, coagulation factor II (thrombin) receptor-like 3; Flt3, FMS-like tyrosine kinase 3; Gata2, GATA-binding protein 2; Gpr56, G protein-coupled receptor 56; Hoxa7, homeobox A7; Hspa1a, heat-shock protein 1A; Iigp, interferon-inducible GTPase; Ipo4, importin 4; Itsn,

intersectin (SH3 domain protein 1A); Jun, Jun oncogene; Kit, kit oncogene; Ly64, lymphocyte antigen 64; Mbdin, methyl-CpG-binding domain protein 2 interacting protein; Mcoln2, mucolipin 2; Mfng, manic fringe homolog (*Drosophila*); Mllt3, myeloid/lymphoid or mixed lineage-leukemia translocation to 3 homolog (*Drosophila*); Mpl, myeloproliferative leukemia virus oncogene; Nmyc1, neuroblastoma myc-related oncogene 1; Nr4a1, nuclear receptor subfamily 4, group A, member 1; Procr, protein C receptor, endothelial; Ptov1, prostate tumor overexpressed gene 1; Pura, purine-rich element-binding protein A; Rasd1, RAS, dexamethasone-induced 1; Rex3, reduced expression 3; Rga, recombination activating gene 1 gene activation; Rpl36, ribosomal protein L36; Sds-rs1, serine dehydratase related sequence 1; Serpina3g, serine (or cysteine) proteinase inhibitor, clade A, member 3G; Ski, Sloan-Kettering viral oncogene homolog; Socs2, suppressor of cytokine signaling 2; Surf2, surfeit gene 2; Taf1c, TATA box-binding protein (Tbp)-associated factor, RNA polymerase I, C; Tal1, T-cell acute lymphocytic leukemia 1; Tbxas1, thromboxane A synthase 1, platelet; Tgtp, T cell-specific GTPase; Tnfrsf7, tumor necrosis factor receptor superfamily, member 7; Vwf, Von Willebrand factor homolog; Wbp5, WW domain-binding protein 5; Zfp1, zinc finger protein 1; Zfp64, zinc finger protein 64; Zfp68, zinc finger protein 68.

1. Ivanova, N. B., Dimos, J. T., Schaniel, C., Hackney, J. A., Moore, K. A. & Lemischka, I. R. (2002) *Science Online* **298**, 601-604.
2. Ramalho-Santos, M., Yoon, S., Matsuzaki, Y., Mulligan, R. C. & Melton, D. A. (2002) *Science* **298**, 597-600.