

Genotype	Average myeloid:erythroid ratio	Average megakaryocyte # / section
<i>Lman1</i> ^{+/+}	1.79	338.0
<i>Lman1</i> ^{-/-}	1.77	310.3

Table S1. Number of megakaryocytes in *Lman1*^{-/-} and wildtype littermate bone marrows by histologic evaluation.

Primer	5' → 3' Sequence
qRT-PCR primers	
<i>Gapdh</i> Fwd	TGTGTCCGTCGTGGATCTGA
<i>Gapdh</i> Rev	ACCACCTTCTTGATGTCATCATACTT
<i>Actin</i> Fwd	CTAAGGCCAACCGTGAAAAG
<i>Actin</i> Rev	GGGGTGTTGAAGGTCTCAA
mTPO1 Fwd	GACTCCCACCTCCTTCACAG
mTPO1 Rev	TCCCAGGCTAAAGTCCACAG
mTPO2 Fwd	CCTGGGAGAATGGAAAACCC
mTPO2 Rev	CTGTCCTCGTGCTGCCA
mTPO3 Fwd	ACAGCTTTCTGGGCAGGTT
mTPO3 Rev	GGTCCTTGTGAGCTGTGGTC

Table S2. Primer sequences for qRT-PCR.

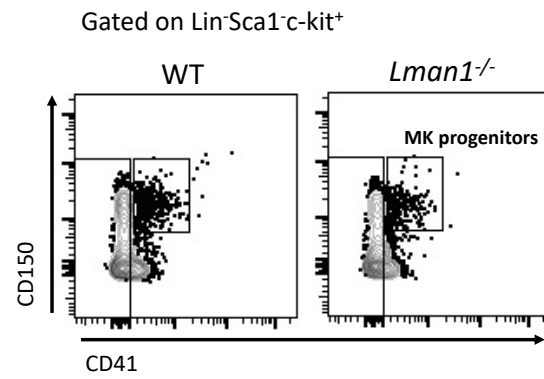


Figure S1. Gating strategy for MK progenitors.

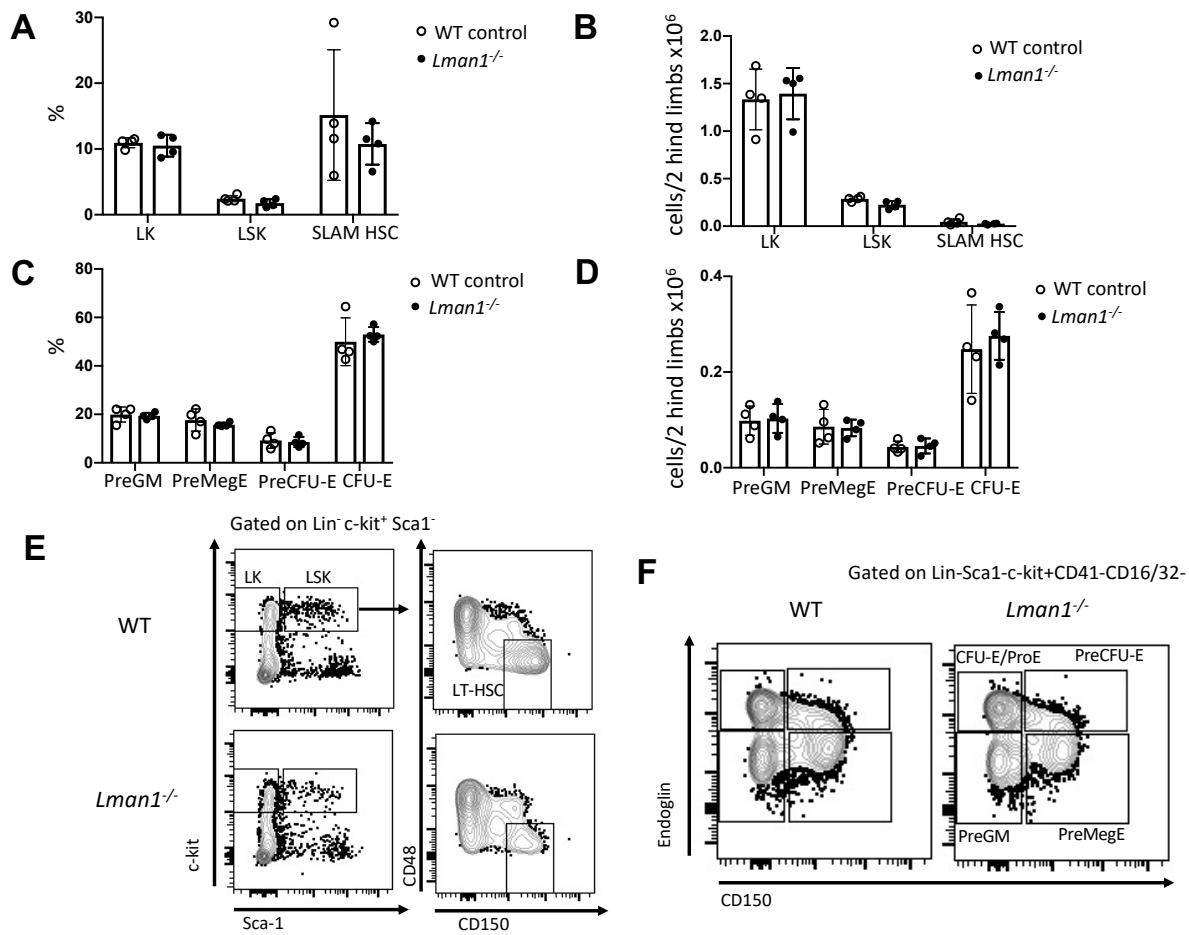


Figure S2. Hematopoietic stem and progenitor cells in *Lman1*^{-/-} and wildtype control mice. LMAN1 deficient mice exhibit normal (A) percentages and (B) numbers of SLAM hematopoietic stem cells (Lin⁻Sca1⁻c-KIT⁺CD150⁺CD48⁺), LK (Lin⁻Sca1⁻c-KIT⁺), and LSK (Lin⁻Sca1⁻c-KIT⁺) progenitors, as well as normal (C) percentages and (D) numbers of PreGM (Lin⁻c-KIT⁺Sca1⁻CD41⁻CD16/32⁻CD150⁻CD105⁻), PreMegE (Lin⁻c-KIT⁺Sca1⁻CD41⁻CD16/32⁻CD150⁺CD105⁻), PreCFU-E (Lin⁻c-KIT⁺Sca1⁻CD41⁻CD16/32⁻CD150⁺CD105⁺), and CFU-E (Lin⁻c-KIT⁺Sca1⁻CD41⁻CD16/32⁻CD150⁻CD105⁺) progenitors. (E, F) Illustration of the gating strategy for LK, LSK, SLAM HSC, preGM, preMegE, preCFU-E, and CFU-E populations.

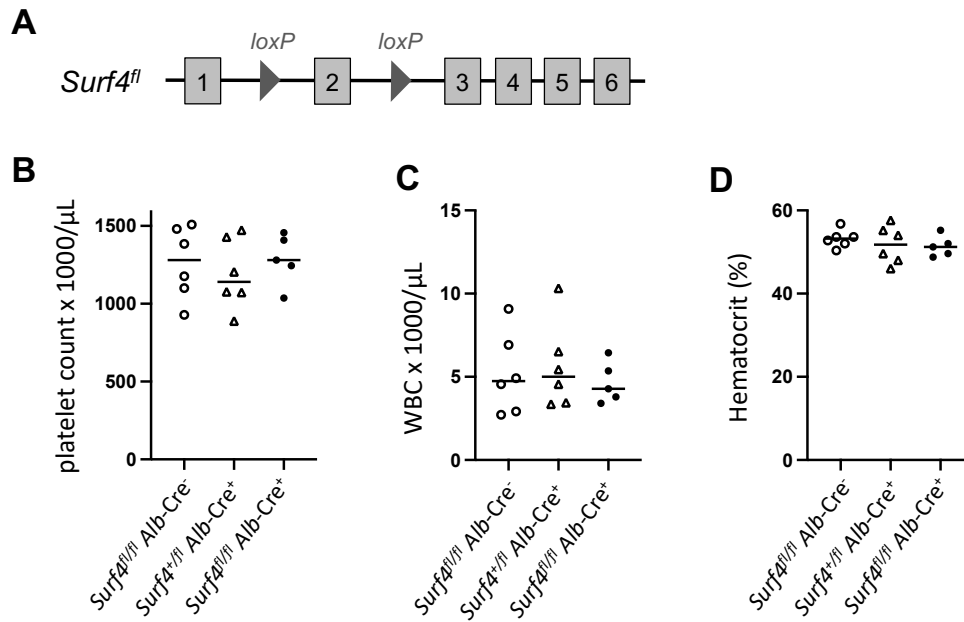


Figure S3. Deletion of *Surf4* in hepatocytes does not result in thrombocytopenia. (A) Mice with hepatocyte-specific *Surf4* deletion were generated. These mice did not exhibit (B) thrombocytopenia compared to littermate controls. *Surf4^{fl/fl} Alb-Cre⁺* mice exhibit (C) white blood cell counts and (D) hematocrit levels indistinguishable from wildtype littermate controls.

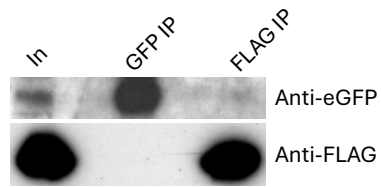


Figure S4. MCFD2 and TPO do not interact by co-immunoprecipitation. FLAG-tagged MCFD2 was expressed in HEK293T cells expressing eGFP-tagged TPO. A physical interaction between TPO and MCFD2 was not apparent, as an anti-FLAG antibody did not immunoprecipitate TPO-eGFP and an anti-eGFP antibody did not immunoprecipitate MCFD2-FLAG. IP, immunoprecipitated fraction. In, input (10%).

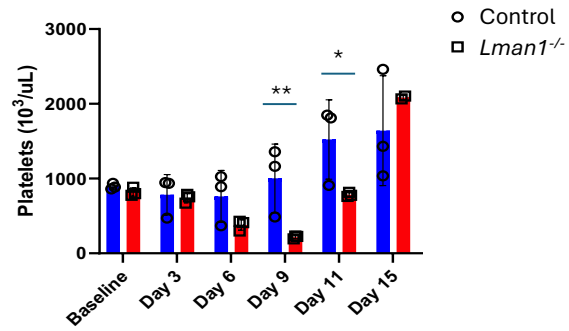


Figure S5. *Lman1* null mice exhibit delayed platelet recovery under hematopoietic stress. Platelet counts of *Lman1*^{-/-} and wildtype littermate control mice measured on days 3, 6, 9, 11, and 15 following administration of 5-FU. **p<0.01; *p<0.05. Data was analyzed using unpaired Student's t-test.