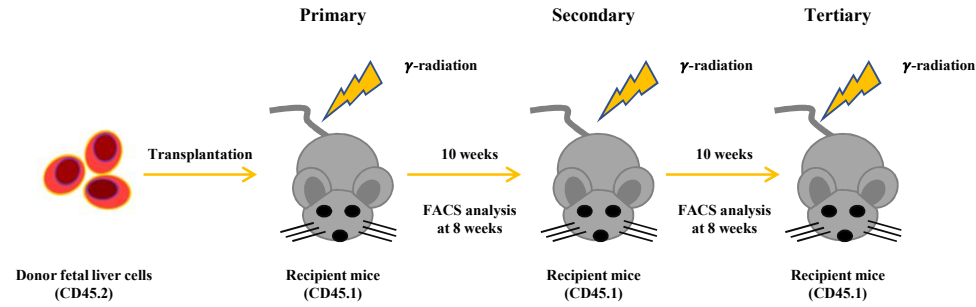
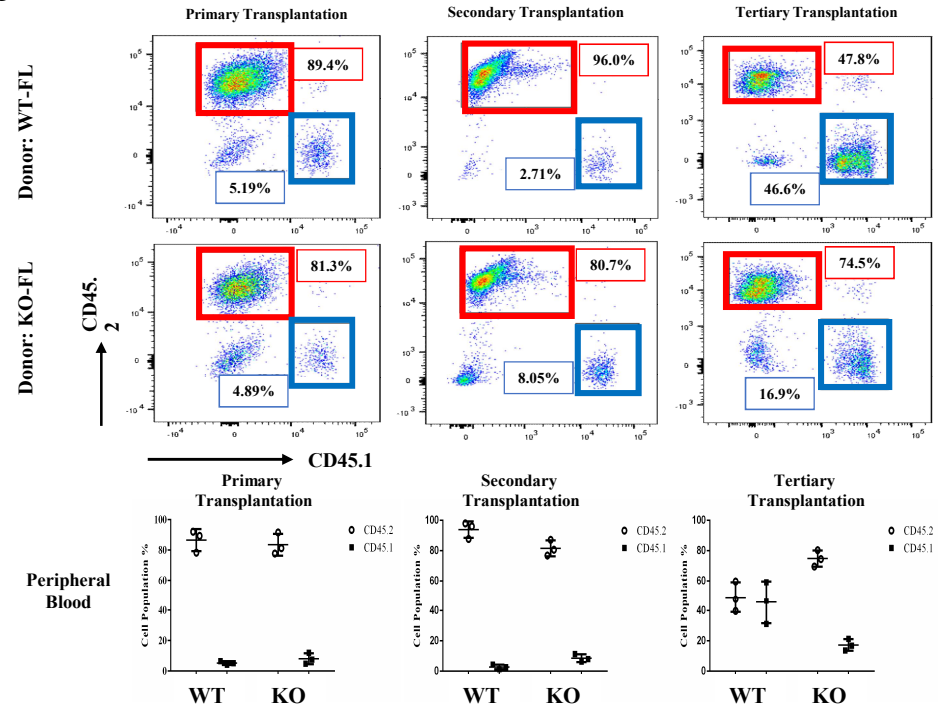


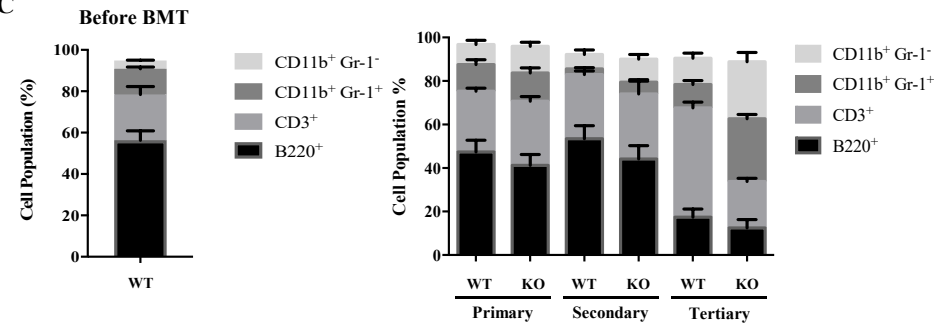
A



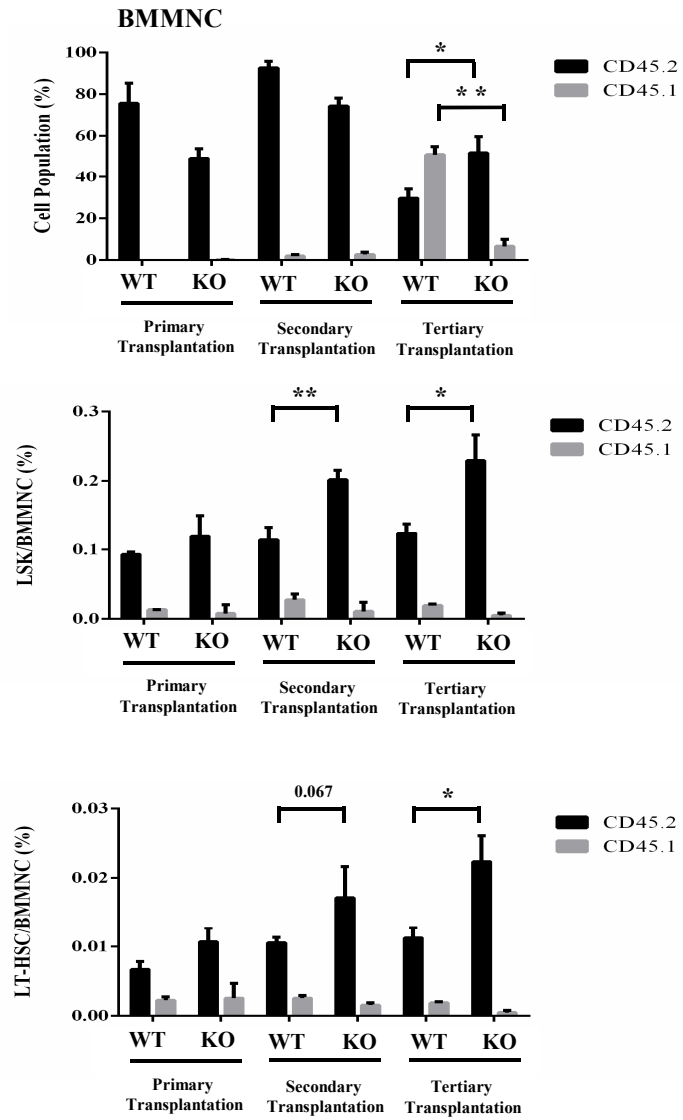
B



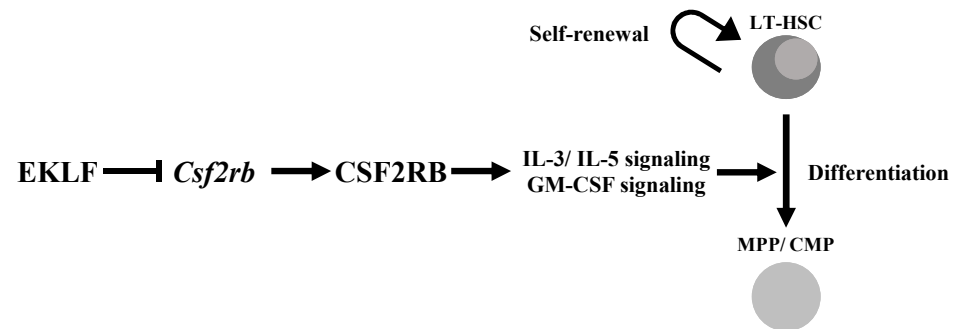
C



A



B



Supplementary Table 1. Number/ fetal liver of different types of hematopoietic cells in E14.5 fetal livers from WT and *Eklf*^{-/-} embryos, respectively

	Cell number x10⁶ / E14.5 Fetal Liver	
Cell Types	WT	KO
Erythrocyte	23.4±0.02	0.2±0.03 (-99%)
Cell number x10³ / E14.5 Fetal Liver		
Cell Types	WT	KO
LT-HSC	7.1±1.2	2.9±0.3 (-59%)
MPP	19.0±3.5	24.3±2.0 (+27%)
LSK	26.1±3.2	27.2±3.3 (+4%)
Cell number x10⁴ / E14.5 Fetal Liver		
CMP	14.7±2.7	19.9±2.9 (+36%)
GMP	26.6±6.3	39.6±7.7 (+48%)
MEP	31.9±4.4	21.5±1.5 (-32%)
Cell number x10⁵ / E14.5 Fetal Liver		
Monocyte	6.8±0.7	6.9±1.0 (+1.5%)
Macrophage	7.7±1.7	2.6±1.2 (-66%)
Megakaryocyte	32.9±2.3	64.4±5.4 (+95%)
Dendritic cell	15.2±2.0	19.6±0.9 (+28%)

The E14.5 fetal liver cells were analyzed by FACS, and the average cell number/ fetal liver of each cell types is presented. Differences of the cell numbers of the KO fetal liver relative to the WT fetal liver are shown in the parentheses as percentages (%) which are also shown in Fig 1E. N≥6

Supplementary Table 2. List of surface markers used for detection and/or sorting of different types of hematopoietic cells from fetal liver, bone marrow or peripheral blood

Cell type	Surface Markers
LT-HSC	Lin ⁻ c-Kit ⁺ Sca-1 ⁺ (Thy1.1 ^{lo}) Flk2 ⁻ CD34 ⁻
BM LT-HSC	Lin ⁻ c-Kit ⁺ Sca-1 ⁺ Flk2 ⁻ CD34 ⁻
MPP	Lin ⁻ c-Kit ⁺ Sca-1 ⁺ (Thy1.1 ⁻) Flk2 ⁺ CD34 ⁺
CMP	Lin ⁻ c-Kit ⁺ Sca-1 ⁻ CD34 ⁺ CD16/32 ^{int}
GMP	Lin ⁻ c-Kit ⁺ Sca-1 ⁻ CD34 ⁺ CD16/32 ^{hi}
MEP	Lin ⁻ c-Kit ⁺ Sca-1 ⁻ CD34 ⁻ CD16/32 ^{lo/int}
Monocyte	CD11b ⁺ CD11c ⁻ or CD11b ⁺ Gr-1 ⁻
Macrophage	F4/80 ⁺
Dendritic cells	CD11b ⁻ 33D1 ⁺
Erythrocyte	Ter119 ⁺
Megakaryocyte	CD41 ⁺ CD42d ⁺
Granulocyte	CD11b ^{hi} Gr-1 ^{hi} or CD11b ⁺ Gr-1 ⁺
T cells	CD3 ⁺
B cells	B220 ⁺

Supplementary Table 3. List of PCR primers used in RT-qPCR analysis of the mRNAs and sequences of the DNA oligos used for CRISPR/Cas9 editing of ES cells

	Forward	Reverse
<i>Eklf</i>	5'-GGACACCCAGGAGGACTTC-3'	5'-GGGCCTCCGATTCAGACTCA-3'
<i>Actin</i>	5'-ATGGAGGGGAATACAGCCC-3'	5'-TTCTTTGCAGCTCCTTCGT-3'
<i>Csf2rb</i>	5'-ACAGAGAACCTAGATCGAGCC-3'	5'-GTGTACTCTTCGCTCCACTTG-3'
<i>Stat1</i>	5'-CTGAATATTTCCCTCCTGGG -3'	5'-TCCCGTACAGATGTCCATGAT-3'
<i>Stat2</i>	5'-GCTGTCAAGGTTCTGCAACA-3'	5'-CGCTTGAGAATTGGAAGTT-3'
<i>Fcer1a</i>	5'-GAGTGCCACCGTTCAAGACA-3'	5'-GTAGATCACCTTGCGGACATTC-3'

Name	Sequence	Applications
<i>Eklf</i> -gRNA-F	5'-acctTCACGTGAGTCTGAAATCGG-3'	Construction of the <i>Eklf</i> -gRNA expression plasmid
<i>Eklf</i> -gRNA-R	5'-aacCCGATTCAGACTCACGTGA-3'	
<i>Eklf</i> -F	5'-CTAGCAAGACCTAATGGAGTTGTC-3'	PCR across the Cas9/gRNA target site of <i>Eklf</i>
<i>Eklf</i> -R	5'-CAAAGGCCCAGTCACCAACC-3'	

F-forward primer/ R-reverse primer