Antibodies	Clones	Supplier	Cat. No
c-kit(CD117)	2B8	BD Pharmingen	553355
Sca-1(Ly6-A/E)	D7	BD Pharmingen	558162
c-kit(CD117)	2B8	BioLegend	105826
c-kit(CD117)	2B8	BioLegend	105808
Sca-1(Ly6-A/E)	D7	BioLegend	122514
Mouse Lineage Antibody Cocktail	145-2C11, M1/70, RA3-6B2, TER-119, RB6-8C5	BD Pharmingen	558074/ 561301
Biotin Mouse Lineage Panel	145-2C11, M1/70, RA3-6B2, TER-119, RB6-8C5	BD Pharmingen	559971
CD48	HM48-1	BioLegend	103432
CD150	TC15-12F 12.2	BioLegend	115922
CD34	RAM34	eBioscience	11-0341
CD16/CD32	93	eBioscience	48-0161
CD3e	145-2C11	BioLegend	100330
CD19	1D3	eBioscience	11-0193
CD19	1D3	BD Pharmingen	557399
B220	RA3-6B2	eBioscience	11-0452
Gr1(Ly-6G/C)	RB6-8C5	eBioscience	48-5931
CD11b	M1/70	BD Pharmingen	552850
CD127	SB/199	BD Pharmingen	564175
CD106/VCAM-1	429	BD Pharmingen	553332
CD51	RMV-7	eBioscience	13-0512
CD31	MEC 13.3	BD Pharmingen	553373
CD31	390	eBioscience	17-0311
CD135	A2F10	BioLegend	135315
IgM	RMM-1	BioLegend	406515

IgD	11-26c.2a	BioLegend	405712
CD45.1	A20	BioLegend	110726
CD45.1	A20	BD Pharmingen	553776
CD45.2	104	BD Pharmingen	558702
CD144/VE-cadherin	BV13	BioLegend	138005
CD144/VE-cadherin	BV13	eBioscience	53-1441
CD45	30-F11	eBioscience	13-0451
TER-119	TER-119	eBioscience	13-5921
CD61	2C9.G3	eBioscience	11-0611
Ki-67	SolA15	eBioscience	11-5698

Supplementary Table 1: Antibodies used for flow cytometry analysis.

Supplementary Figures

Supplementary Figure 1. Fluorescent microscopy image showing the distribution of Del-1 in the BM. VE-cadherin staining is used for endothelial cells (scale bar, 100 μm).

Supplementary Figure 2. G-CSF levels in the plasma of *Edil3*$^{-/-}$ (n=10 mice) and *Edil3*$^{+/+}$ mice (n= 9 mice). Mann-Whitney U test.

Supplementary Figure 3. Analysis of lymphoid lineage populations in the BM of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice. (A) Representative flow cytometry plots and number of (B) B220^{+}CD19^{-}IgM^{-} pre-pro B, (C) B220^{+}CD19^{+}IgM^{hi}IgD^{-} transitional (D) B220^{+}CD19^{+}IgM^{int} immature and (E) B220^{+}CD19^{+}IgD^{+} mature B cells in the BM of 10 week-old *Edil3*$^{-/-}$ (n=8 mice) and *Edil3*$^{+/+}$ mice (n=12 mice). (F) Number of common lymphoid progenitors (CLP; Lin^{-}Sca1^{low}cKit^{low}Flt3^{+}IL7Rα^{+}) in the BM of 10 week-old *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice (n= 5 mice per group). Data presented as mean±SEM. Mann-Whitney U test.

Supplementary Figure 4. Hematopoietic progenitors in Del-1 deficiency. (A) Representative flow cytometry plots, (B) LSK, (C) LT-HSC, (D) ST-HSC and (E) MPP in the BM of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice (n=10 mice per group). (F) Representative flow cytometry plots and (G) percentage of Flt3^{-}CD34^{+} myeloid biased MPPs in *Edil3*$^{-/-}$ (n= 8 mice) and *Edil3*$^{+/+}$ mice (n=9 mice). (H) *Cebpe*, *Csf1r*, *Csf2ra*, *Irf8* expression in CD48^{-} LSK cells from the BM of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice (n=4 mice per group). The mRNA expression was normalized against 18s. Data presented as mean±SEM. Mann-Whitney U test, **P*<0.05, ***P*<0.01.

Supplementary Figure 5. Circulating and splenic hematopoietic and myeloid progenitor cells under steady-state conditions. (A) LSK and (B) LK cell numbers in the peripheral blood of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice (n=7-9 mice per group). (C) Number of CFC in the peripheral blood of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice (n=6-7 mice per group). (D) Numbers and (E) percentages of LSK cells in the spleen of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice (n=8 mice per group) and (F) numbers and (G) percentages of LK cells in the spleen of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice (n=8 mice per group). Data presented as mean±SEM. Mann-Whitney U test, **P*<0.05, ***P*<0.01.

Supplementary Figure 6. Differentiation assay of MPPs and CMPs. (A) MPPs from WT mice were cultured with Del-1−Fc or Fc-control (500 ng/ml each) in cell suspension cultures and analysis was performed after 48h. Percentage of GMPs is shown (n=5 cultures). (B) CMPs from WT mice were cultured with Del-1−Fc or Fc-control (500 ng/ml each) in cell suspension cultures and analysis was performed after 48h. Percentage of GMPs is shown (n=5 cultures). Mann-Whitney U test.

Supplementary Figure 7. Del-1 does not affect early homing into the BM. Short-term migration assay of hematopoietic progenitors**.** Accumulation of CFSE^{+} LSK in the BM of recipient *Edil3*$^{-/-}$ (n=6 mice) or *Edil3*$^{+/+}$ mice (n=5 mice) at 3h after adoptive transfer of CFSE-labelled Lin^{-} cells from WT mice. Cell accumulation in the BM is expressed as the percentage of CFSE^{+} LSK in total LSK. Data presented as mean±SEM. Mann-Whitney U test.

Supplementary Figure 8. β3 integrin mediates the interaction of hematopoietic progenitors with Del-1. (A) Lethally irradiated *Edil3*$^{+/+}$ or *Edil3*$^{-/-}$ mice were transplanted with CD45^{+} BM cells derived from *Itgb3*$^{-/-}$ mice. Numbers of (B) LSK cells, (C) CMPs, (D) GMPs and (E) Gr1^{hi}CD11b^{+}, (F) Gr1^{int}CD11b^{+} myeloid cells in the BM of recipient *Edil3*$^{+/+}$ or *Edil3*$^{-/-}$ mice 6

weeks post-transplantation (n= 10 mice per group). Data presented as mean±SEM. Mann-Whitney U test was used.

Supplementary Figure 9 (Complementary to Figure 8). G-CSF levels in the plasma of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice at 24h following the second injection of LPS (n=6 mice per group). Mann-Whitney U test.

Supplementary Figure 10. Circulating and splenic hematopoietic and myeloid progenitor cells after LPS administration. (Complementary to Figure 8). (A) LSK and (B) LK cell numbers in the peripheral blood of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice after 72h following the second injection of LPS (n=4-5 mice per group). (C) Numbers of LSK and (D) numbers of LK cells in the spleen of *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice after 72h following the second injection of LPS (n=9 mice per group). Data presented as mean±SEM. Mann-Whitney U test.

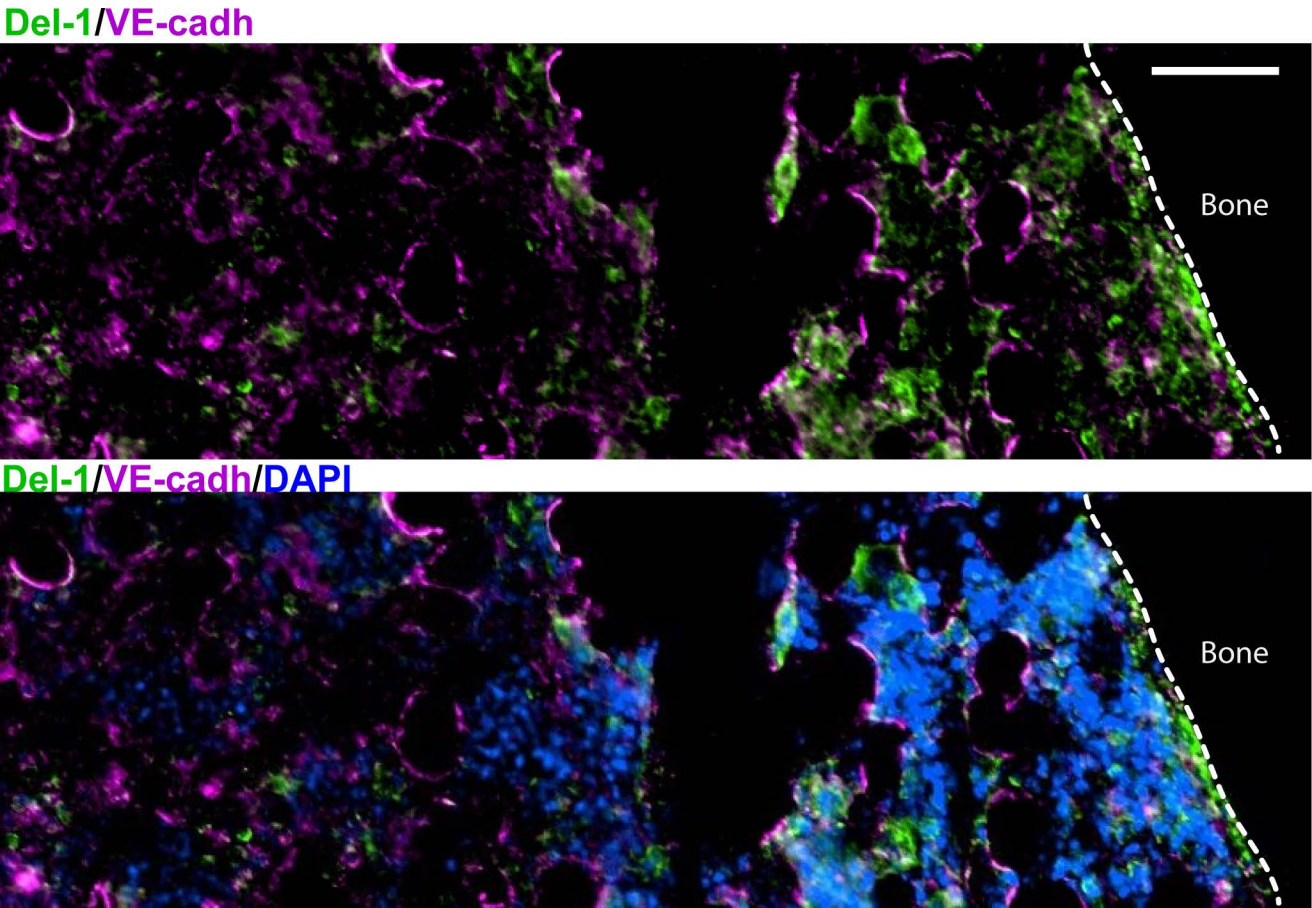
Supplementary Figure 11. Role of Del-1 in hematopoietic progenitor response to G-CSF administration. (Complementary to Figure 9). (A) Total cellularity, (B) Gr1^{hi}CD11b^{+} and (C) Gr1^{int}CD11b^{+} myeloid cell numbers in the BM of *Edil3*$^{-/-}$ (n=14 mice) and *Edil3*$^{+/+}$ mice (n=10 mice) 24h after a single G-CSF administration. (D) LSK, (E) LT-HSC, (F) ST-HSC, (G) MPP and (H) CMP cell numbers in the BM of *Edil3*$^{-/-}$ (n=6 mice) and *Edil3*$^{+/+}$ mice (n=5 mice) 24h after a single G-CSF administration. (I) Representative flow cytometry plots and (J) cell cycle analysis in LT-HSC derived from *Edil3*$^{-/-}$ (n=5 mice) and *Edil3*$^{+/+}$ mice (n=7) after three injections of G-CSF. Data presented as mean±SEM. Mann Whitney U test, *P<0.05, **P<0.01, ***P<0.001.

Supplementary Figure 12. Del-1 promotes myelopoiesis in response to G-CSF administration. (Complementary to Figure 9). *Edil3*$^{-/-}$ and *Edil3*$^{+/+}$ mice were injected daily

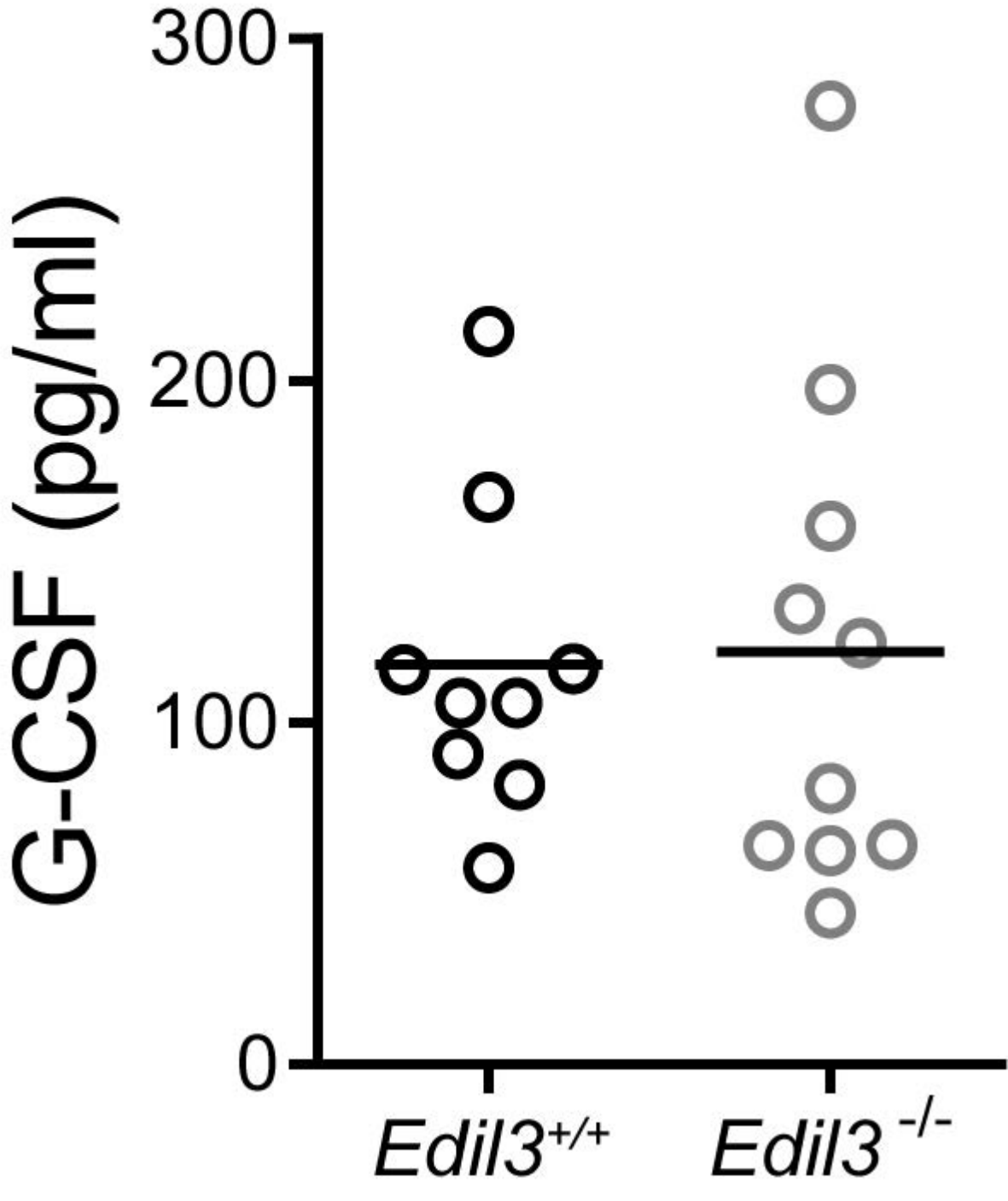
with G-CSF (n=6 mice per group) or PBS (n=5 mice per group) for 6 days. (A) The percentage of GMPs was assessed by flow cytometry. The percentage of GMPs in the BM after 6 daily injections of G-CSF was expressed relative to the percentage of GMPs in the BM after 6 daily injections of PBS (% G-CSF/ % PBS). (B) The percentage of LSK cells was assessed by flow cytometry. The percentage of LSKs in the BM after 6 daily injections of G-CSF was expressed relative to the percentage of LSKs in the BM after 6 daily injections of PBS (%G-CSF/ %PBS). Data presented as mean±SEM. Mann Whitney U test, $^{**}P<0.01$.

Supplementary Figure 13. (Complementary to Figure 9). (A) *Cxcl12* (B) *Angpt1* and (C) *Kitl* mRNA levels in the BM of *Edil3*$^{+/+}$ and *Edil3*$^{-/-}$ mice on day 6 of the G-CSF administration protocol. Mice treated with PBS were used as control (Ctrl) (n=6-7 mice per group). Data presented as mean±SEM. One-way ANOVA followed by Holm Sidak's multiple comparison test, $^{*}P<0.05$, $^{**}P<0.01$, $^{***}P<0.001$, $^{****}P<0.0001$.

Supplementary Figure 1



Supplementary Figure 2



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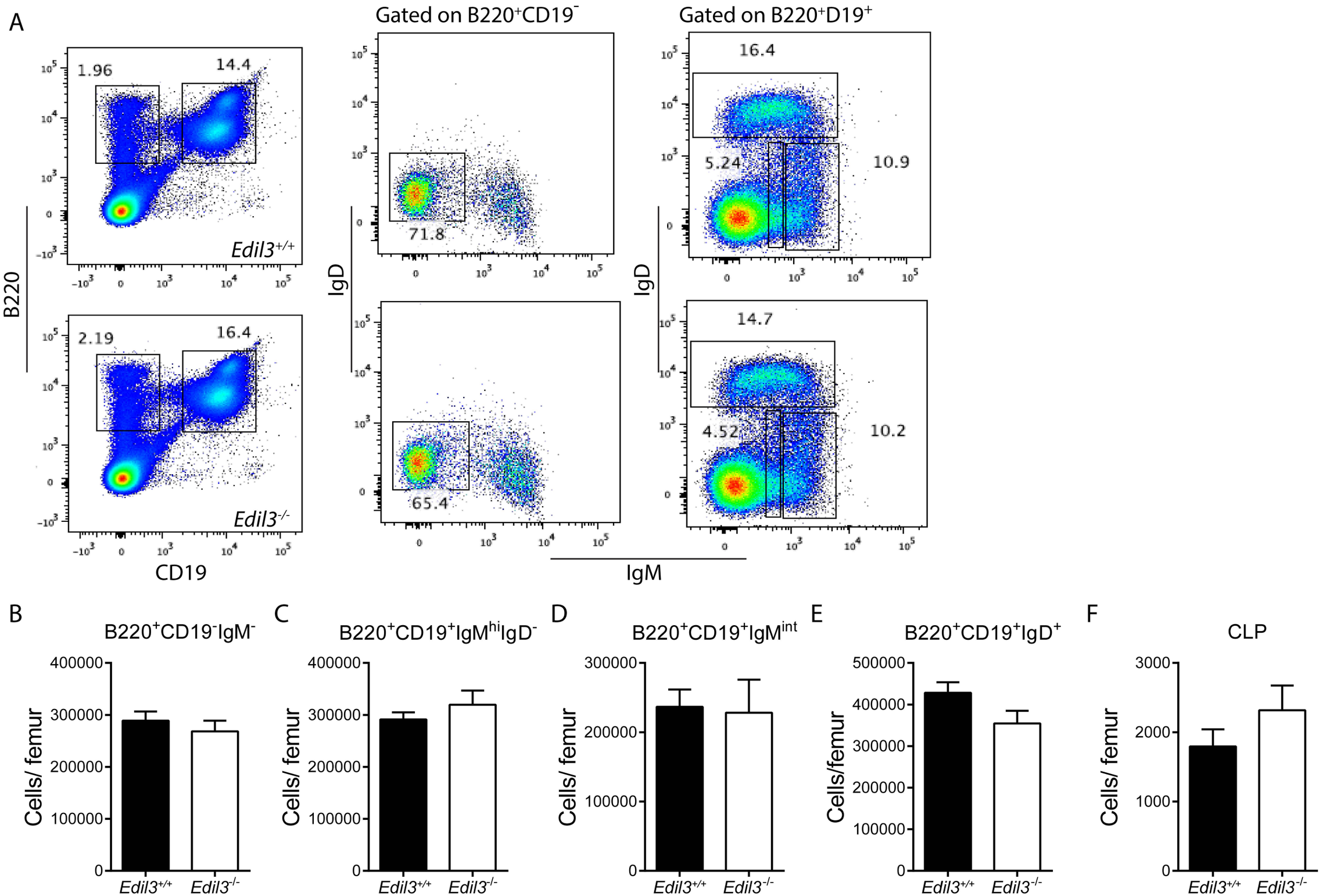

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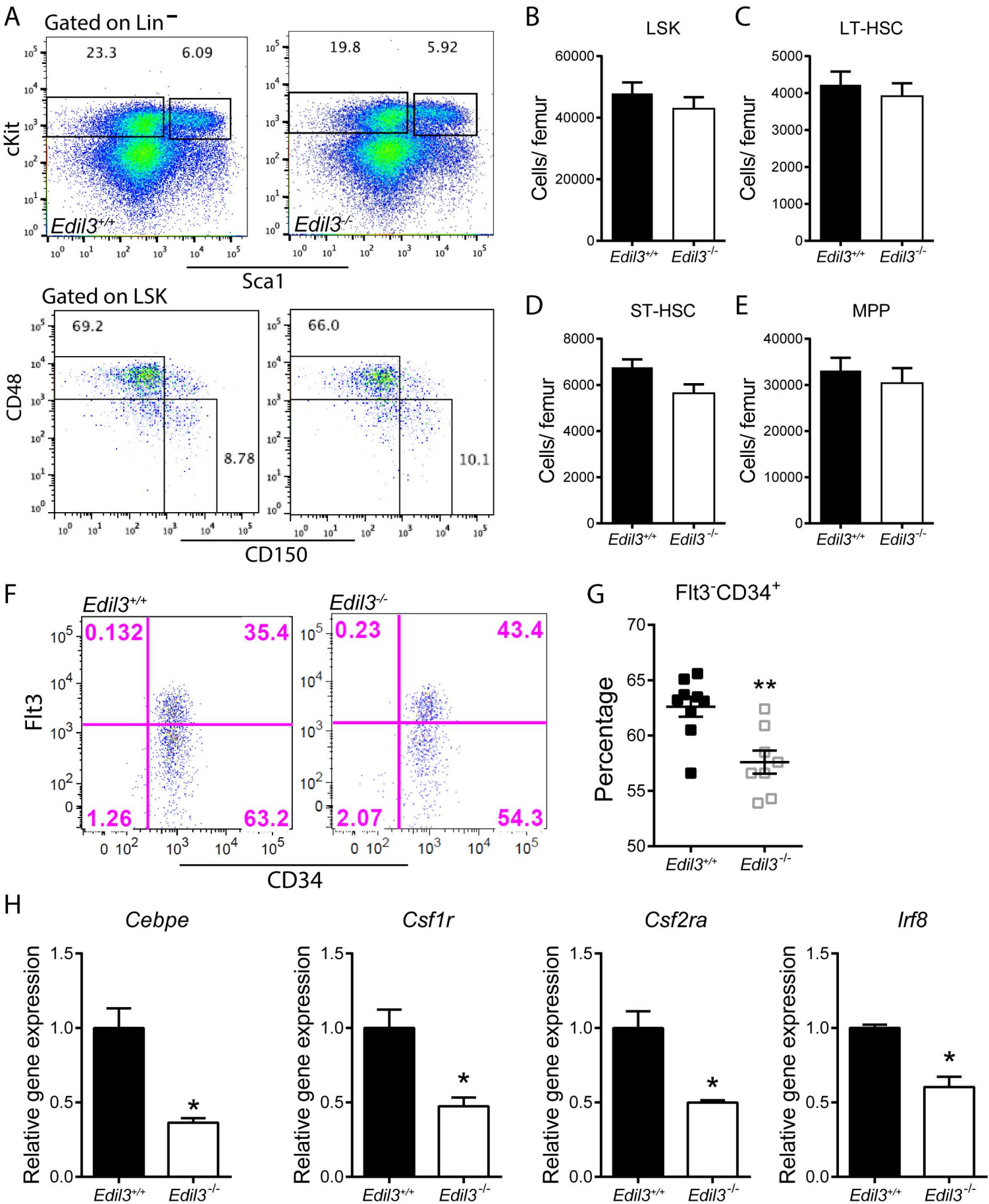

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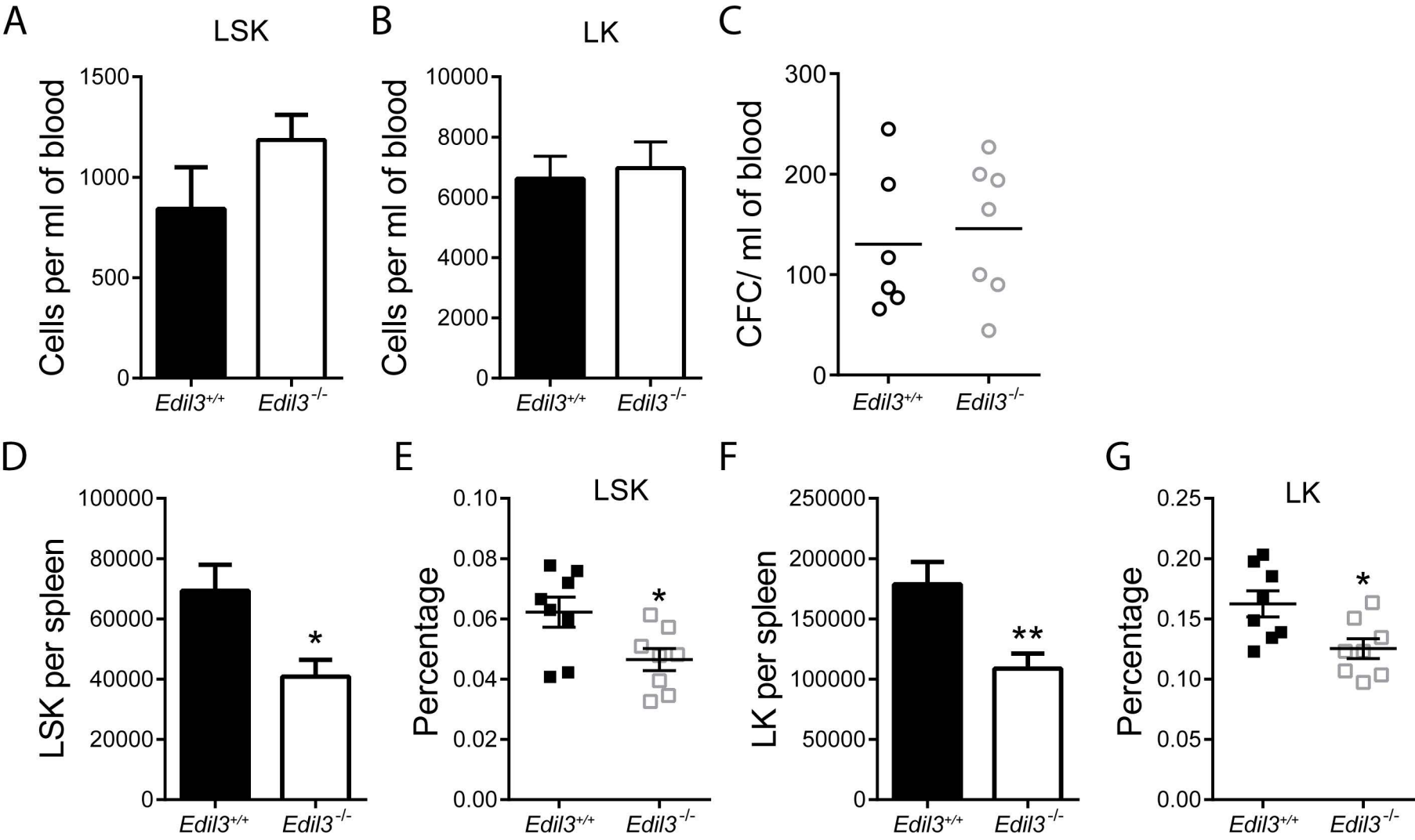

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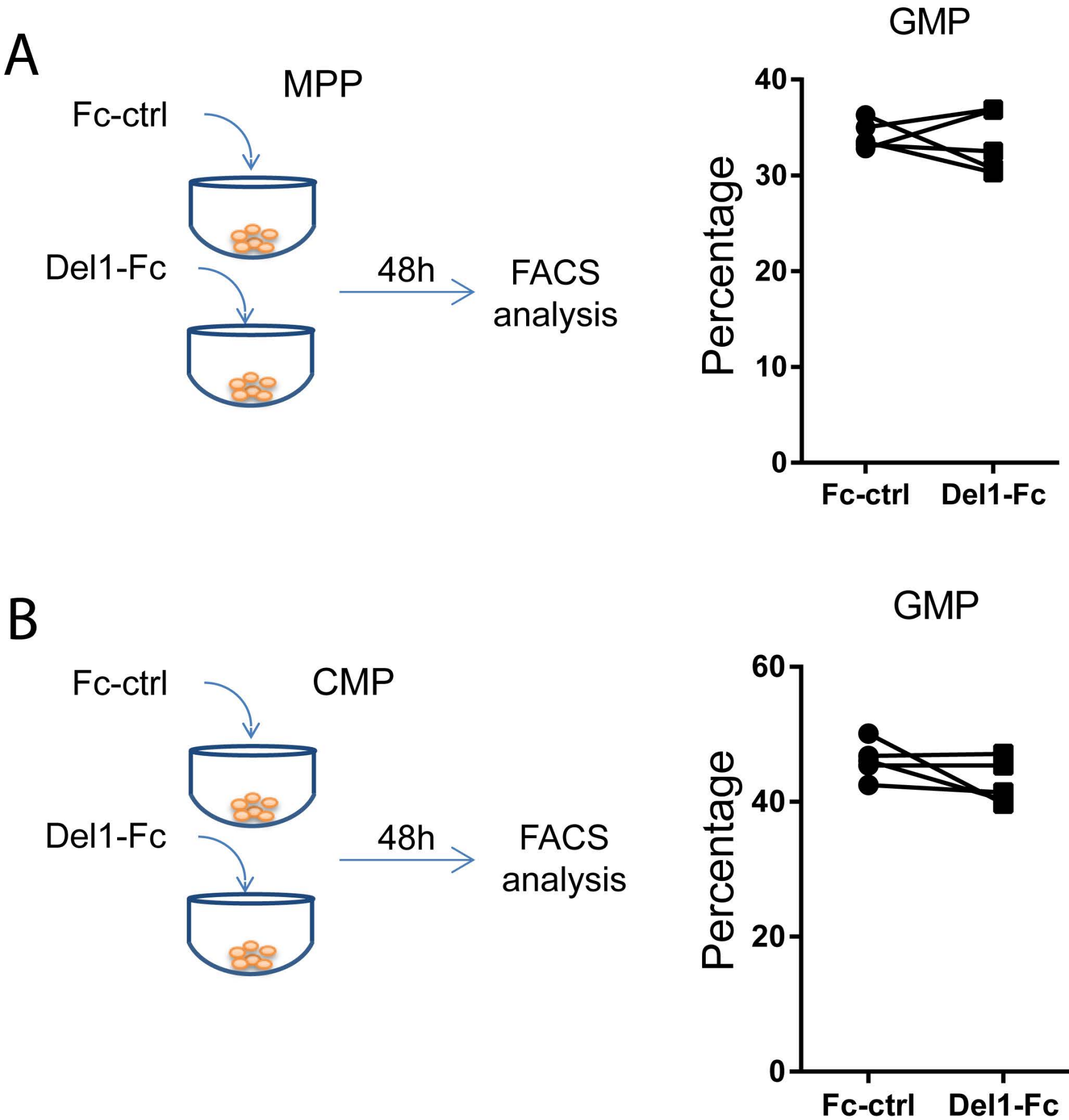

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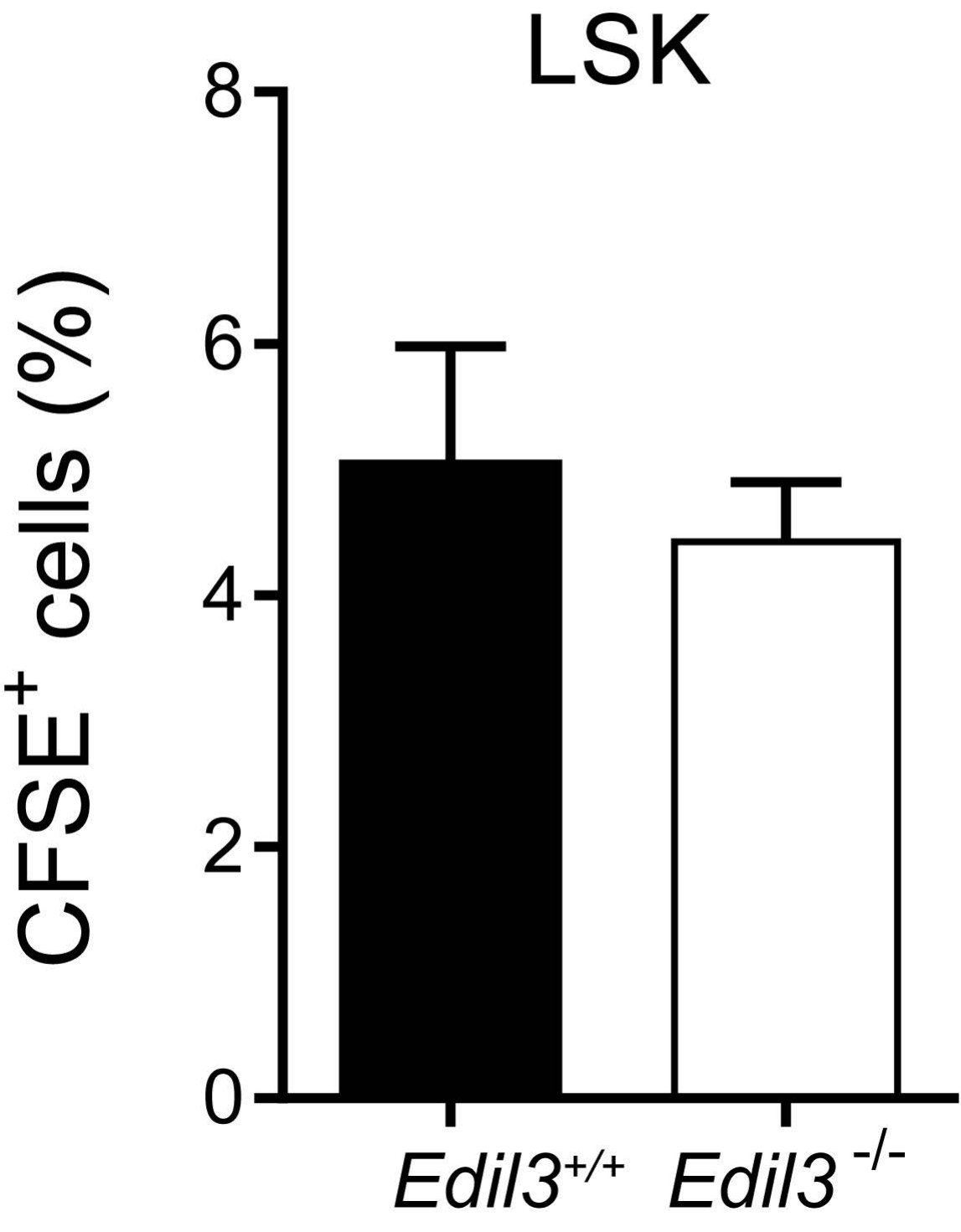

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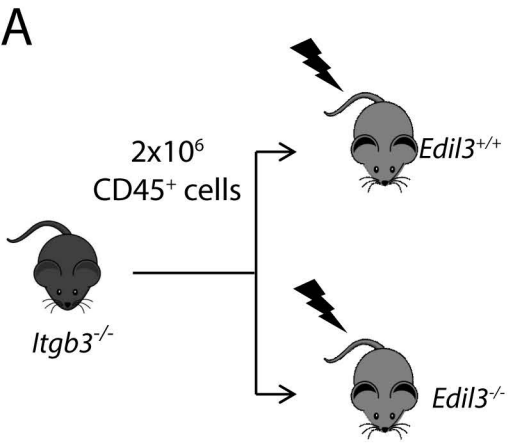
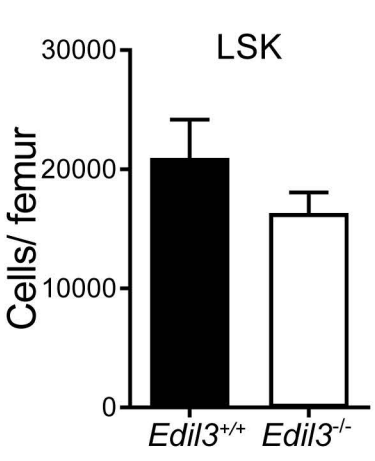
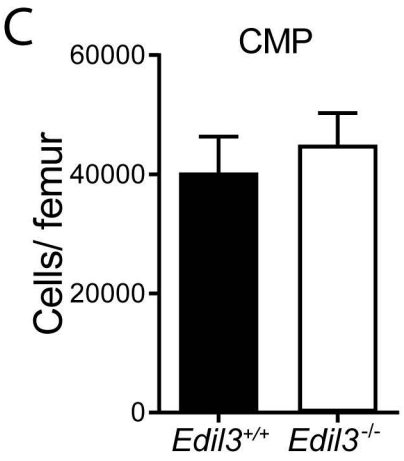
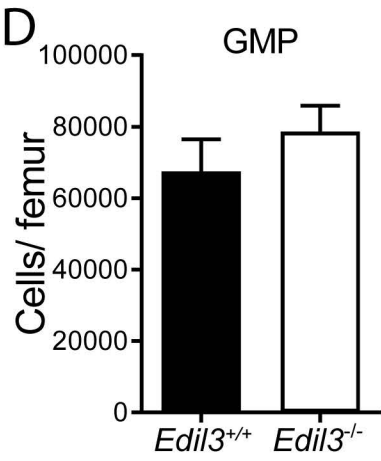
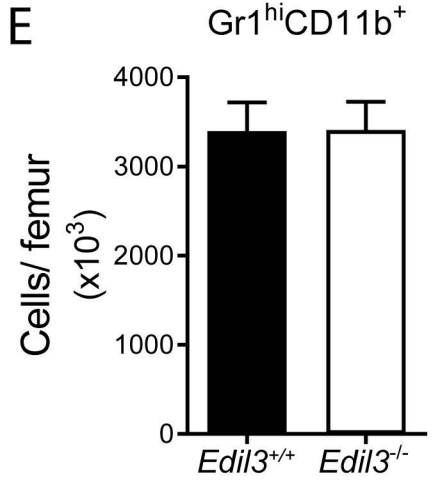
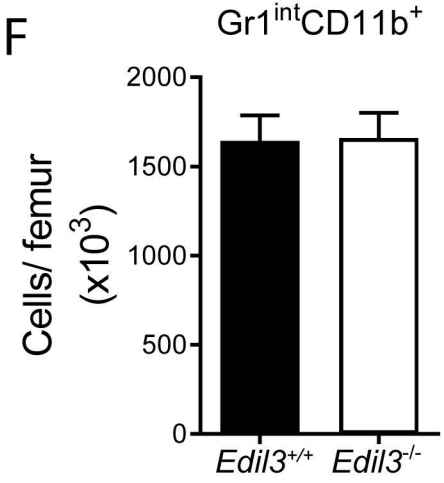




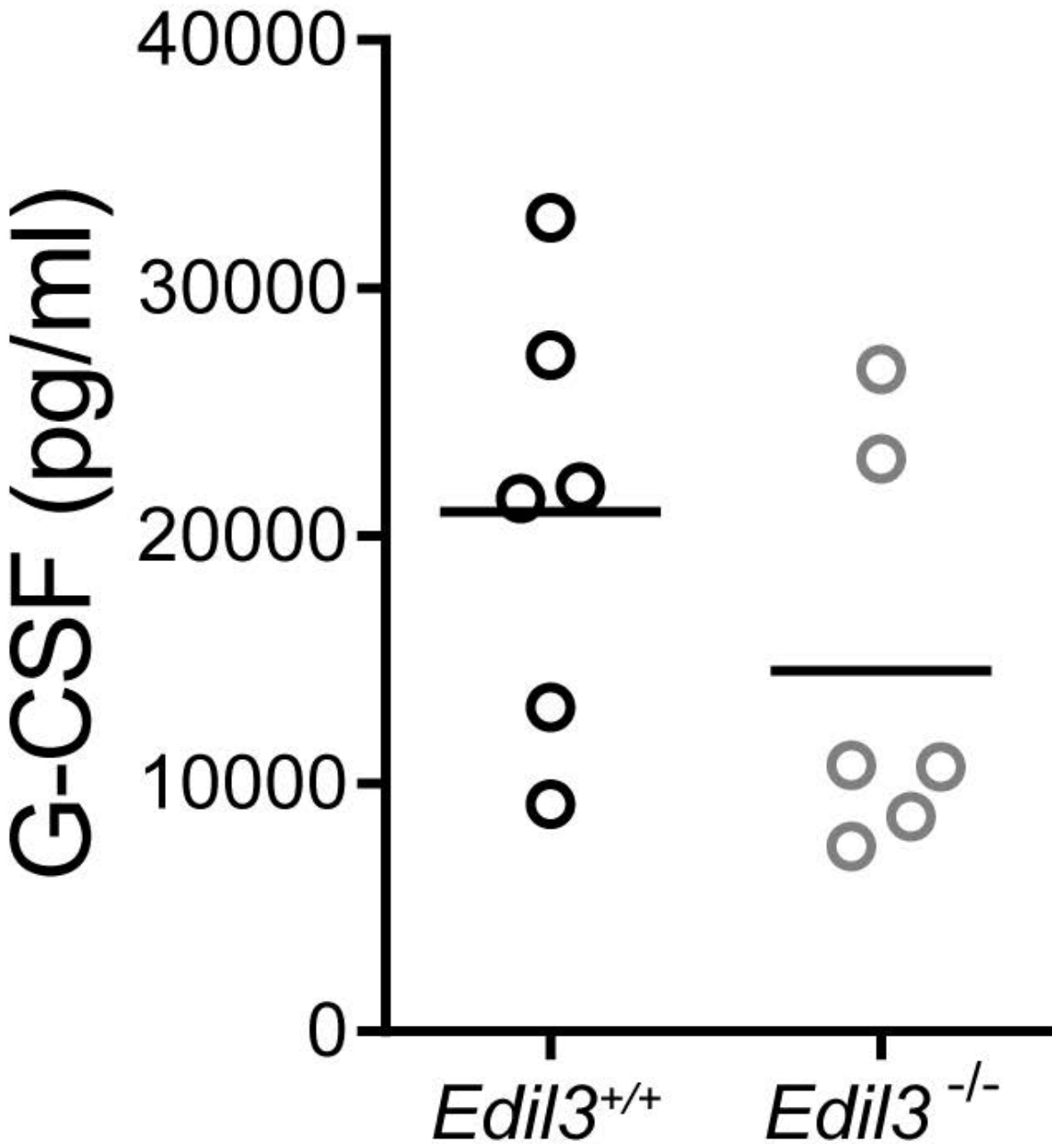




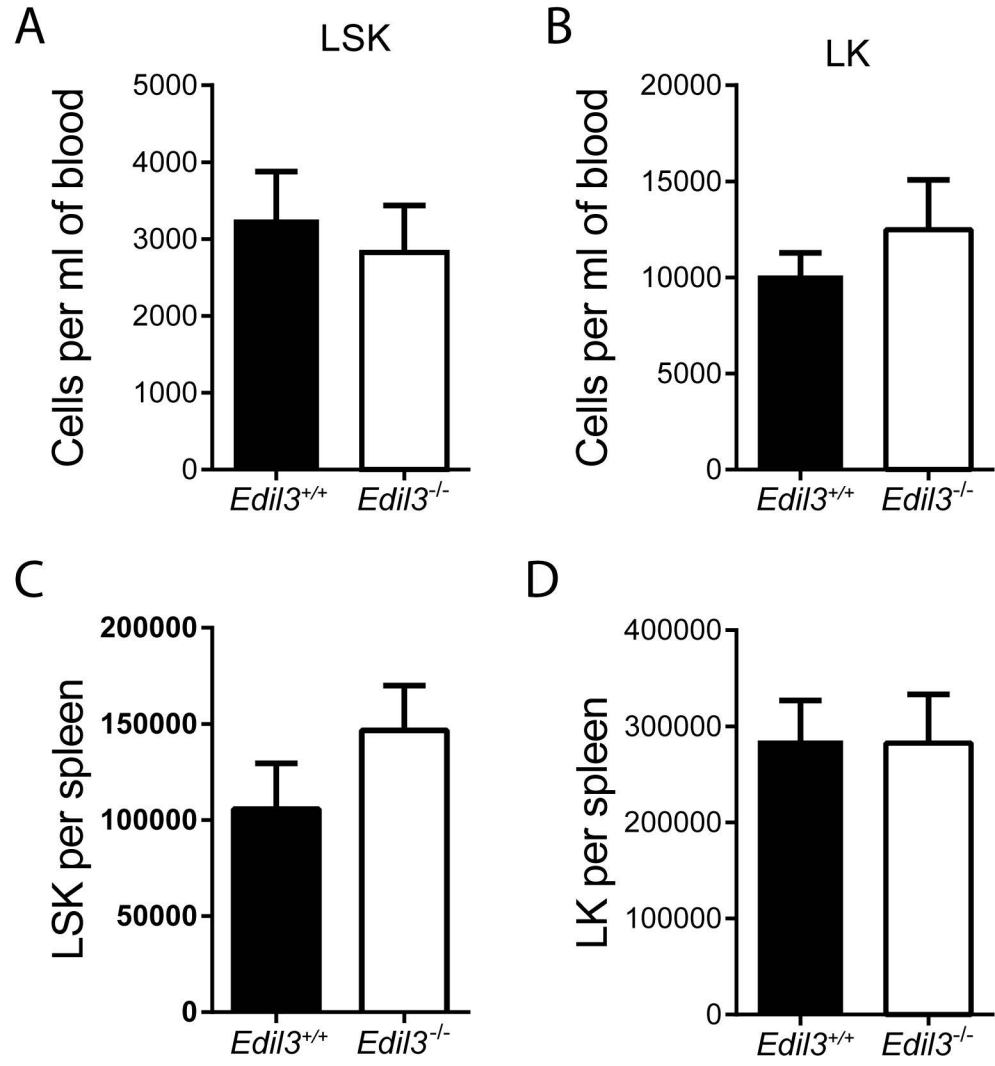




Supplementary Figure 9



Supplementary Figure 10



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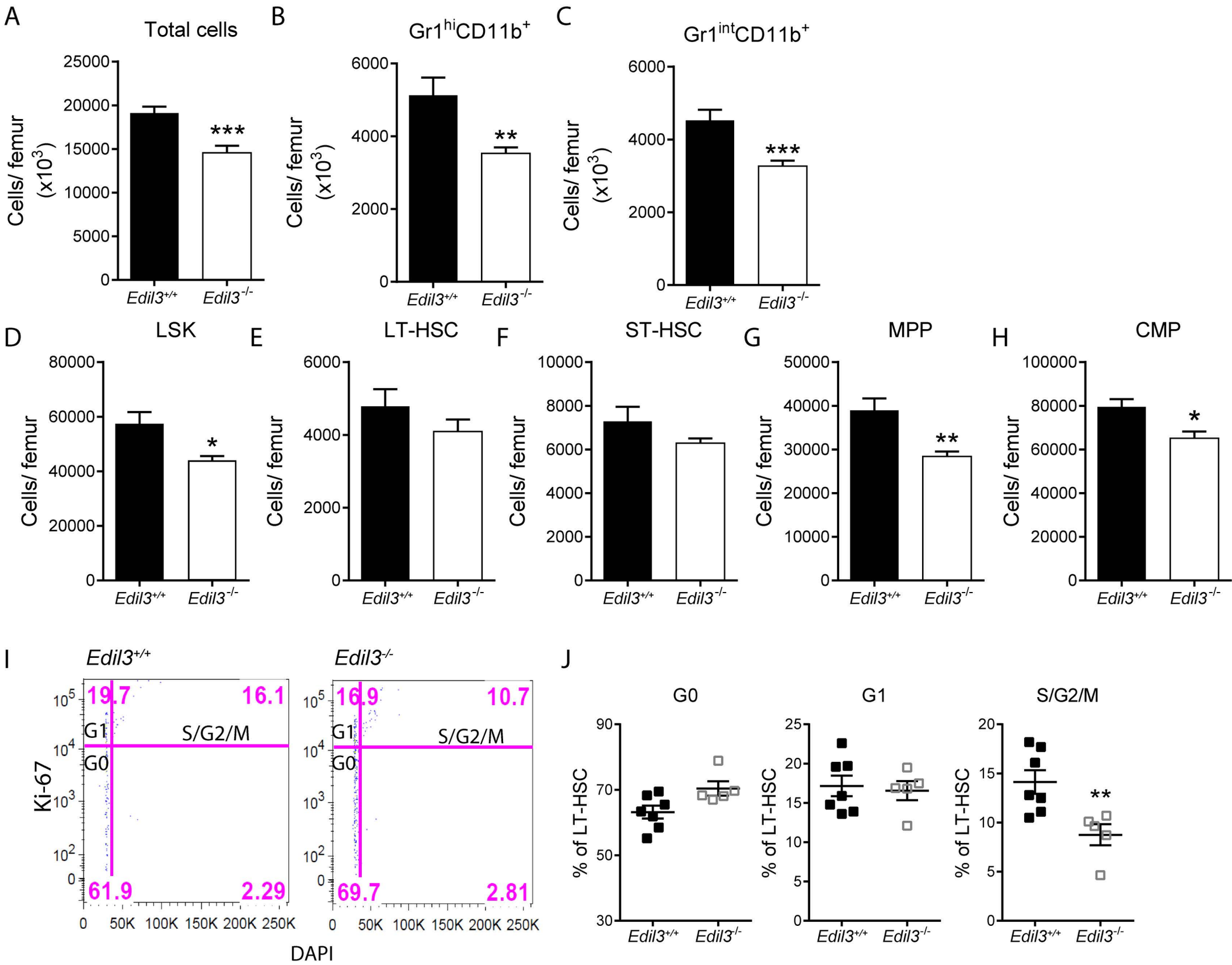

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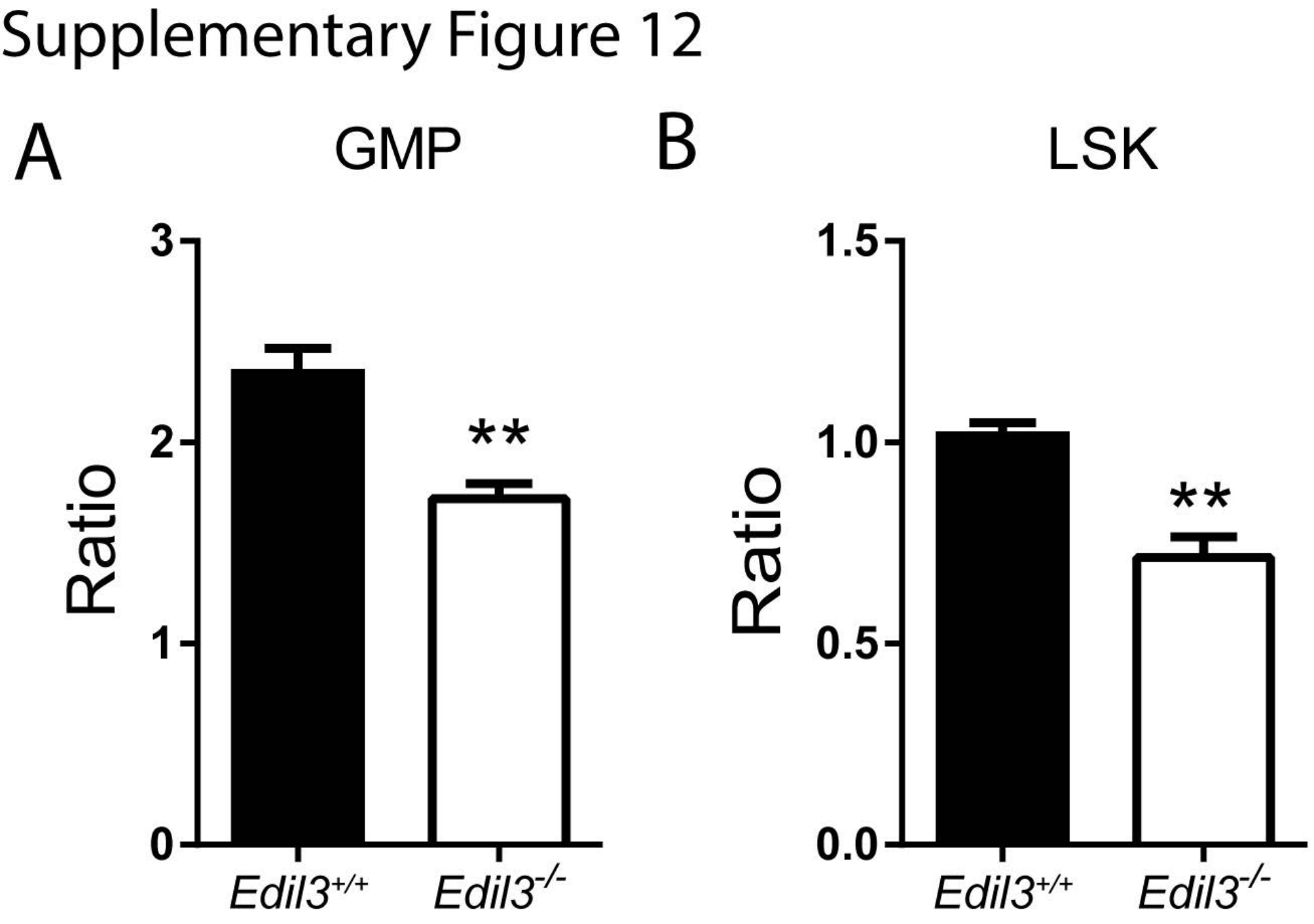

Supplementary Figure 13