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The Gp1ba-Cre transgenic mouse:

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Supplemental Table 1

Supplemental Table 1. The *Pf4-Cre* mouse model was utilized in over 160 studies to date.

Supplemental Table 2

Supplemental Table 2. Mendelian frequencies of *Gp1ba-Cre* mice.

Genotype	Total number of mice	Expected frequency	Actual frequency
Gp1ba-Cre ^{+/+}	26	25%	20.8%
Gp1ba-Cre ^{+/KI}	67	50%	53.6%
Gp1ba-Cre ^{KI/KI}	32	25%	25.6%

Data was collected from 7 breeding pairs (*Gp1ba-Cre*^{+/Kl} × *Gp1ba-Cre*^{+/Kl}).

Supplemental Table 3

Supplemental Table 3. Hematology data of *Gp1ba-Cre* mice.

Hematological parameters	$Gp1ba$ - $Cre^{+/+}$ (mean \pm SD; n = 40)	$Gp1ba-Cre^{+/KJ}$ (mean \pm SD; n = 42)
PLT (10 ⁶ /mL)	1090 ± 135	1079 \pm 208
MPV (fl)	5.5 ± 0.1	$6.4\pm0.3^{***}$
RBC (10 ⁶ /µL)	11.4 ± 0.7	11.8 ± 1.0
HCT (%)	32.7 ± 2.8	33.4 ± 2.2
WBC (10 ³ /μL)	8.5 ± 3.1	7.5 ± 2.7
LYM (10 ³ /μL)	11.4 \pm 4.2	9.9 ± 3.6
MON (10 ³ /μL)	0.6 ± 0.4	$0.8\pm$ 0.6
NEU (10 ³ /μL)	1.6 ± 0.6	1.4 ± 0.4
EOS (10 ³ /μL)	0.04 ± 0.08	0.03 ± 0.09
BAS (10 ³ /μL)	0.09 ± 0.09	0.07 ± 0.07

PLT, platelets; MPV, mean platelet volume; RBC, red blood cells; HCT, haematocrit, WBC, white blood cells; LYM, lymphocytes; MON, monocytes; NEU, neutrophils; EOS, eosinophils; BAS, basophils. ***P < 0.001, unpaired, two-tailed t-test, mean ± SD.



Supplemental Figure 1. Platelet parameters of the Gp1ba-Cre^{KI/KI} mouse.

(A) Platelet counts, n = 8-42 mice/genotype. (B) Platelet volumes, n = 8-42 mice/genotype. (C) Platelet surface receptor expression of GPIb α , GPIb β , GPIX and GPV were measured by flow cytometry and shown as median fluorescence intensity, n = 3-4 mice/genotype. Asterisks refer to significant difference compared with WT (***P* < 0.01, ****P* < 0.001, 1-way ANOVA with Tukey's test) mean ± SD

Supplemental Figure 2



Supplemental Figure 2. Aggregation of *Gp1ba-Cre* platelets in response to higher agonist concentrations. Mean platelet aggregation and secretion traces in response to the indicated agonists, n = 4-8 mice/condition/genotype.

Supplemental Figure 3



fibrinogen



Supplemental Figure 3. Spreading of *Gp1ba-Cre* platelets on fibrinogen. (a) Representative differential interference contrast (DIC) microscopy images of resting (basal) and thrombin-stimulated (0.1 Units/ml) platelets spread on fibrinogen-coated cover-slips (100 μ g/ml, 45 minutes, 37°C), scale bar: 5 μ m. (b) Mean surface area of individual platelets quantified by ImageJ software, n = 5 mice/condition/genotype. Unpaired, two-tailed t-test, mean ± SD.





Supplemental Figure 5



Supplemental Figure 5. tdTomato+ fraction of eGFP+ platelets. n=6