The relative importance of platelet integrins in hemostasis, thrombosis and beyond

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Received: Accepted: Eary view:

October 6, 2022. January 9, 2023. January 26, 2023.

https://doi.org/10.3324/haematol.2022.282136

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PF4Cre-\beta1^{-/-} mice display a normal bleeding time and blood loss. After severing the tail of PF4Cre (n = 11) and PF4Cre- β 1^{-/-} mice (n = 11), the time required for the first arrest of bleeding was recorded (A) and the volume of blood loss was measured over 30 min (B). Symbols represent individual mice. Values are presented as the mean ± standard error of the mean (SEM) and results were compared by the Mann-Whitney test.



Platelet integrin $\alpha 2\beta 1$ and $\alpha v\beta 3$ do not play a major role in experimental thrombosis in mice.

Mice were anesthetized with xylazine 10 mg/kg and ketamine 100 mg/kg and DIOC₆ was injected to label platelets. **A and B,** thrombosis was induced in WT (n = 7) and $\alpha 2$ KO mice (n = 7) by applying a 1x3 mm filter paper saturated with 7.5% FeCl₃ laterally to the common carotid artery for 2.5 min. Thrombus formation was monitored in real time with a fluorescent macroscope (Leica Microsystems San Westlar, Germany). **C and D,** thrombosis was induced in 6 vessels in 4 WT mice and in 10 vessels in 5 $\alpha 2$ KO mice by severe injury of mesenteric arterioles (80-110 µm in diameter) with a high intensity 440-nm-pulsed nitrogen dye laser applied with a Micropoint system (Photonic Instruments, Andor Technology, Belfast, UK). **E and F,** thrombosis was induced in PF4Cre (n = 6) and PF4Cre- $\alpha v^{-1/2}$ mice (n = 5) by compressing the abdominal aorta with forceps for 15 seconds. Thrombus formation was monitored in real time with a fluorescent macroscope (Leica Microsystems San Westlar, Germany). Graphs represent the thrombus surface area over time (mean in solid lines ± standard error of the mean (SEM) in dashed lines) (A, C and E) and the area under the curves were compared using the Mann-Whitney test (B, D and F).