

monoclonal antibodies anti-Human GPVI



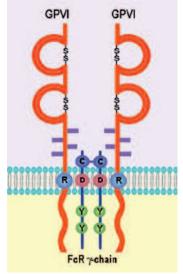
BACKGROUND

Glycoprotein VI (GPVI) is a \sim 62-kDa type 1 transmembrane receptor that belongs to the immunoglobulin superfamily and is noncovalently associated with the signal-transducing FcR γ chain.

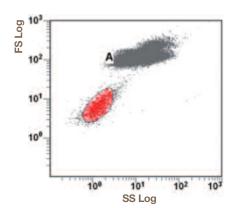
GPVI glycoprotein is a major collagen receptor that plays a crucial role in the collagen-induced activation and aggregation of platelets.

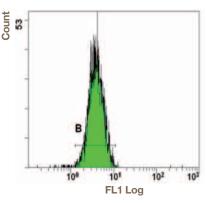
As well as collagen, other ligands such as collagen-related peptide (CRP) and snake venom protein (convulxin) can bind to the extracellular region of GPVI causing ectodomain GPVI shedding¹. This process is tightly regulated by a metalloproteinase, most likely ADAM10, providing a mechanism for the modulation of platelet responsiveness.

Most GPVI is maintained in a monomeric form on resting platelets and GPVI dimerization is an active process that primes platelet interaction with fibrillar collagen and is controlled by cAMP².



Thromb Res 2004, 114:221-233





APPLICATION

- Using quantitative flow cytometry (PLATELET Calibrator kit, Cat.Nr. 00457), a density of around 5,000 GPVI molecules/platelet has been found.
- GPVI-PE may be used to analyse surface expression of human platelet GPVI³.

FORMAT

Product description	Cat. Nr.	Packaging
Anti-human GPVI purified*	01083	0.1 mg/mL, 1 mL
Anti-human GPVI PE conjugated*	01084	100 tests, 2 mL

^{*} For Research Use Only. Not for use in diagnostic procedures Exclusive licence with Monash University (Clone 1G5, murine MAb4)

BIBLIOGRAPHY

- 1. Gardiner E. et al., J Thromb Haemost. 2007, 5:1530-7
- 2. Loyau S. et al., ATVB 2012, 32:778-785.
- 3. Qiao J. et al., Blood 2013, 121:8, 1479-81.
- 4. Al-Tamimi M. et al., Platelets 2009, 20:2, 75-82.



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