

M011-0

Product Information

Catalog Number:	M011-0
Clone / Isotype:	JAQ1/ Rat (Wistar) IgG2a
Contents:	0.1 mg purified immunoglobulin in 20 mM Tris buffered saline containing 0.25% BSA and 0.09% (w/v) sodium azide
Concentration:	0.5 mg/ml

For research use only, not for diagnostic or therapeutic use. This product is no medical device.

Specificity: The JAQ1 antibody reacts with mouse GPVI, a platelet/megakaryocyte-specific 60 to 65 kDa type I transmembrane glycoprotein belonging to the immunoglobulin superfamily¹. GPVI non-covalently associates with the signal-transducing FcR γ -chain in the platelet membrane and serves as an activating collagen receptor². JAQ1 inhibits collagen-induced aggregation of mouse platelets³. JAQ1 alone does not activate platelets. Cross-linking of JAQ1 by a secondary antibody, however, induces activation and aggregation of mouse platelets³.

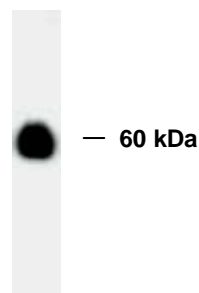
Preparation and Storage: The antibody was purified from hybridoma cell culture supernatant by Protein G-Sepharose chromatography. Stable for six months from date of shipment when stored at 4°C. Aliquots can be stored at -20°C for at least one year. Avoid repeated freezing and thawing.

Usage: This preparation can be used for immunoprecipitation, immunohistochemical analysis of acetone-fixed frozen sections, and immunofluorescent staining (1-3 μ g/10⁶ platelets or cells). JAQ1 recognizes mouse GPVI in a Western blot analysis under non-reducing conditions³. For varying applications, appropriate dilutions must be determined individually.

Caution: Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer.

JAQ1 recognizes GPVI in Western blot analysis

After separation of mouse platelet lysate by SDS-PAGE (non-reducing conditions) and transfer to PVDF membrane, the membrane was incubated with JAQ1 (1-3 μ g/ml) and bound antibody was visualized with HRP-conjugated anti-rat IgG and ECL.



References:

1. Clemetson JM, Polgar J, Magnenat E, et al. (1999) The platelet collagen receptor glycoprotein VI is a member of the immunoglobulin superfamily closely related to Fc α R and the natural killer receptors. *J Biol Chem.* 274(41):29019-24
2. Nieswandt B, Watson SP. (2003) Platelet-collagen interaction: is GPVI the central receptor? *Blood.* 102(2):449-61.
3. Nieswandt B, et al. (2000): Expression and function of the mouse collagen receptor glycoprotein VI is strictly dependent on its association with the FcR γ chain. *J Biol Chem.* 275(31):23998-4002.