

DESCRIPTION

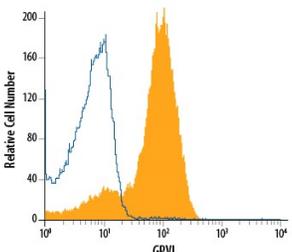
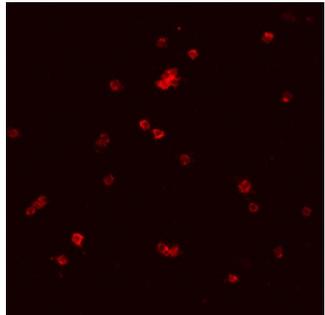
| | |
|---------------------------|---|
| Species Reactivity | Mouse |
| Specificity | Detects mouse GPVI in ELISAs. In direct ELISAs, no cross-reactivity with recombinant human GPVI is observed. |
| Source | Monoclonal Rat IgG ₁ Clone # 784808 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant mouse GPVI Gly24-Lys265 Accession # P0C191 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

| | Recommended Concentration | Sample |
|----------------------------|--|---------------|
| Flow Cytometry | 2.5 µg/10 ⁶ cells | See Below |
| Immunocytochemistry | 8-25 µg/mL | See Below |
| CyTOF-ready | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. | |

DATA

| | |
|---|---|
| <p>Flow Cytometry</p>  <p>Detection of GPVI in Mouse platelets by Flow Cytometry. Mouse platelets were stained with Rat Anti-Mouse GPVI Monoclonal Antibody (Catalog # MAB6758, filled histogram) or isotype control antibody (Catalog # MAB005, open histogram), followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113).</p> | <p>Immunocytochemistry</p>  <p>GPVI in Mouse Platelets. GPVI was detected in immersion fixed adult mouse platelets using Rat Anti-Mouse GPVI Monoclonal Antibody (Catalog # MAB6758) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI. Specific staining was localized to cell surfaces and cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p> |
|---|---|

PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.5 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

GPVI (Platelet Glycoprotein VI; also glycoprotein 5) is a member of the Ig superfamily. It is found on platelets and megakaryocytes, and serves as the main collagen receptor on platelets. Following exposure to subendothelial connective tissue, GPVI binds to a Gly-Pro-(hydroxy)Pro motif on collagen and generates a noncovalent membrane signaling complex with FcR γ-chain. This interaction is stabilized by Integrin α2β1, followed by activation of PLCγ2 with clot initiation. Mature mouse GPVI is a 292 amino acid (aa) type I transmembrane protein. It possesses a 244 aa extracellular region (aa 22-265) that contains two C2-type Ig-like domains (aa 27-197) and two potential glycosylation sites, plus a 37 aa cytoplasmic tail (aa 287-313). There is one potential splice form that shows a deletion of aa 224-240. Over aa 24-265, mouse GPVI shares 70% and 86% aa identity with human and rat GPVI, respectively.