

Biotinylated Anti-mouse FPRP Antibody

ORDERING INFORMATION

Catalog Number: BAF4495

Lot Number: CAEA01

Size: 50 µg

Formulation: 0.2 µm filtered solution in PBS with BSA

Storage: -20° C

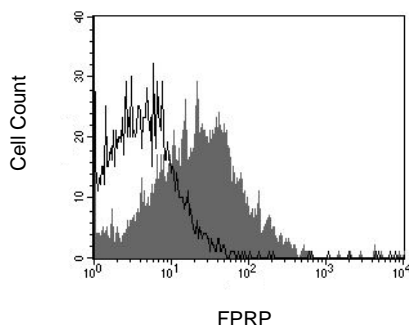
Reconstitution: sterile 0.1% BSA in TBS

Specificity: mouse FPRP
extracellular domain

Immunogen: NS0-derived rmFPRP
extracellular domain

Ig Type: sheep IgG

Applications: Western blot
Flow cytometry



3T3-L1 cells were stained with biotinylated anti-FPRP (R&D Systems, Cat. # BAF4495, filled histogram), or control antibody (open histogram) followed by APC-conjugated streptavidin (R&D Systems, Cat. # F0050).

Background

FPRP (F_{2α} Prostaglandin receptor Regulatory Protein; also CD315, EWI-F and CD9 partner-1/P-1) is a 130 kDa type I transmembrane (TM) glycoprotein member of the EWI subfamily, Ig superfamily of molecules. It associates with the 7-TM prostaglandin F_{2α} receptor, inhibiting its activity. It also forms complexes with 4-TM CD9 and CD81, linking these molecules to the intracellular actin cytoskeleton. Mature mouse FPRP is 858 amino acids (aa) in length. Its extracellular domain (ECD) contains six C2-type Ig-like domains (aa 22 - 813) plus a Pro-Thr-Glu-Leu ER retention signal. The ECD of mouse FPRP (aa 22 - 832) shares 89% and 98% aa identity with the ECD of human and rat FPRP, respectively.

Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant mouse FPRP extracellular domain (rmFPRP; aa 22 - 832; Accession # NP_035327). Mouse FPRP specific IgG was purified by mouse FPRP affinity chromatography and then biotinylated.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for use in Western blots and flow cytometry.

Applications

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect mouse FPRP. The detection limit for rmFPRP is approximately 5 ng/lane under non-reducing and reducing conditions.

Flow cytometry - This antibody was tested for flow cytometry using 3T3-L1 cells. Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 2.5 x 10⁵ cells in a total reaction volume not exceeding 200 µL. The binding of biotinylated antibodies may be visualized by adding a secondary developing reagent such as streptavidin conjugated to a fluorochrome.

Optimal dilutions should be determined by each laboratory for each application.