Mouse uPAR PE-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 109801

Catalog Number: FAB531P

100 TESTS

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse uPAR in Western blots. In Western blots, this antibody does not cross-react with recombinant human uPAR.
Source	Monoclonal Rat IgG_{2A} Clone # 109801
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse uPAR isoform 1 Leu24-Thr297 Accession # P35456
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

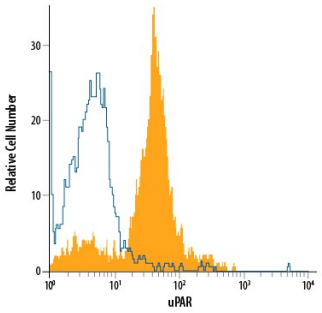
APPLICATIONS

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	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of uPAR in Mouse Blood Monocytes by Flow Cytometry. Mouse whole blood monocytes were stained with Rat Anti-Mouse uPAR PE-conjugated Monoclonal Antibody (Catalog # FAB531P, filled histogram) or isotype control antibody (Catalog # IC006P, open histogram). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

The urokinase-type plasminogen activator (uPA) is one of two activators that converts the extracellular zymogen plasminogen to plasmin, a serine protease that is involved in a variety of normal and pathological processes that require cell migration and/or tissue destruction. uPA is synthesized and released from cells as a single-chain (sc) pro-enzyme with limited enzymatic activity and is converted to an active two-chain (tc) disulfide-linked active enzyme by plasmin and other specific proteinases. Both the scuPA and tcuPA bind with high-affinity to the cell surface via the glycosyl phosphatidylinositol-linked receptor uPAR which serves to localize the uPA proteolytic activity. The enzymatic activity of scuPA has also been shown to be enhanced by binding to uPAR. Independent of their proteolytic activity, the uPA/uPAR interaction also initiates signal transduction responses resulting in activation of protein tyrosine kinases, gene expression, cell adhesion, and chemotaxis. uPAR can interact with integrins to suppress normal integrin adhesive function and promote adhesion to vitronectin through a high affinity vitronectin binding site on uPAR. Mouse uPAR-1/Fc cDNA encodes a 327 amino acid (aa) residue precursor protein with a 23 aa residue signal peptide, seven potential N-linked glycosylation sites and a C-terminal GPI-anchor site. An alternate spliced variant of uPAR encoding a secreted soluble form of uPAR also exists. Human and mouse uPAR share approximately 60% aa sequence identity and the receptor-ligand interaction is highly species-specific. Human uPA binds rmuPAR at a lower affinity compared to rhuPAR.

References:

1. Dear, A.E. and R.L. Medcalf (1998) Eur. J. Biochemistry **252:**185.

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