Human CD39/ENTPD1 Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2991A
Catalog Number: MAB11582

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human CD39 protein in Direct ELISA.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2991A
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese Hamster Ovary cell line, CHO-derived human CD39/ENTPD1 Thr38-Val478 Accession # P49961
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose.

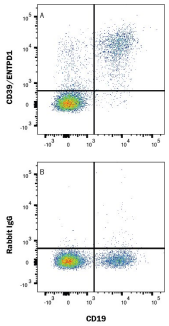
APPLICATIONS

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	0.25 µg/10^6 cells	see below

DATA

Flow Cytometry



Detection of CD39/ENTPD1 in PBMCs by Flow Cytometry
PBMCs were stained with Mouse Anti-Human CD19 PE-conjugated Monoclonal Antibody (Catalog # FAB4867P) and either (A) Rabbit Anti-Human CD39/ENTPD1 Monoclonal Antibody (Catalog # MAB11582) or (B) isotype control antibody (Catalog # AB-105-C) followed by Allophycocyanin-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # F0111). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Reconstitution	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 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

Ectonucleoside triphosphate diphosphohydrolase-1 (NTPDase-1) is an integral membrane protein with an extracellular active site. rhNTPDase-1 was expressed as a protein lacking its N- and C-terminal transmembrane domains, resulting in the secretion of the soluble rhNTPDase-1 ectodomain. NTPDase-1 was originally described as CD39, a B lymphocyte cell surface marker (2), but it is also present on the surface of natural killer cells, T cells, and some endothelial cells (3). NTPDase-1 hydrolyzes the β- and γ phosphate residues of nucleotides, preferring ATP as the substrate. Through its hydrolysis of extracellular nucleotides, NTPDase-1 plays a role in the regulation of purinergic signaling (4). NTPDase-1 is involved in the processes of thrombo regulation and vascular inflammation (5). The administration of soluble NTPDase-1 may have therapeutic applications for the treatment of some vascular and transplantation-associated diseases (6).

References:

1. Maliszewski, C.R. *et al.* (1994) J. Immunol. **153**:3574.
2. Rowe, M. *et al.* (1982) Int. J. Cancer **29**:373.
3. Kansas, G.S. *et al.* (1991) J. Immunol. **146**:2235.
4. Kishore, B.K. *et al.* (2005) Am. J. Physiol. Renal Physiol. **288**:F1032.
5. Marcus, A.J. *et al.* (2005) Semin. Thromb. Hemost. **31**:234.
6. Robson, S.C. *et al.* (2005) Semin. Thromb. Hemost. **31**:217.

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