

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD39/ENTPD1 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant mouse CD39 or recombinant human CD39L2, 3, or 4 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 498409
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human CD39 Thr38-Val478 Accession # P49961
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

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

Ectonucleoside triphosphate diphosphohydrolase-1 (ENTPD1), also called NTPDase-1 and designated CD39, is an integral membrane protein with an extracellular active site. ENTPD1 was originally described as 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). ENTPD1 hydrolyzes the β- and γ phosphate residues of nucleotides, preferring ATP as the substrate. Through its hydrolysis of extracellular nucleotides, ENTPD1 plays a role in the regulation of purinergic signaling (4). ENTPD1 is involved in the processes of thromboregulation and vascular inflammation (5). The administration of soluble ENTPD1 may have therapeutic applications for the treatment of some vascular and transplantation-associated diseases (6). The amino acid sequence of human ENTPD1 shares 77% and 75% identity with that of mouse and rat ENTPD1, respectively.

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