

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD39L4/ENTPD5 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) CD39, rhCD39L1, or rhCD39L3 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 743512
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human CD39L4/ENTPD5 Val21-His428 Accession # O75356
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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

CD39L4, also called ENTPD5 (ectonucleoside triphosphate diphosphohydrolase 5), ER-UDPase and PCPH, is a secreted, 45-51 kDa class II member of the GDA1/CD39 NTPase family of molecules. It is expressed by multiple cell types, including neurons, cardiomyocytes, and hepatocytes. CD39L4 is a divalent cation-dependent enzyme that preferentially hydrolyzes GDP and UDP. In the ER, this enzyme may remove UDP which interferes with proper protein folding and maturation. Extracellularly, CD39L4 may reduce available UDP ligand for P2Y receptors. Mature human CD39L4 is a 408 amino acid (aa) glycoprotein (aa 21-428). It contains four APR (apyrase conserved regions) (aa 54-206) that participate in NTPase activity. CD39L4 has been reported to exist as both monomer and homodimer. Three potential splice variants are reported. One shows a seven aa substitution for aa 401-428, a second contains a five aa substitution for aa 401-428, and a third possesses a 22 aa substitution for aa 215-428. Over aa 21-428, human CD39L4 shares 89% aa sequence identity with mouse CD39L4.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.