

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects recombinant human CD39/ENTPD1 protein in Direct ELISA.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 3304A
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Synthetic peptide Accession # P49961
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and 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.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

**PREPARATION AND STORAGE**

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

**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.

**PRODUCT SPECIFIC NOTICES**

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