

#### DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse CD39/ENTPD1 in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human CD39 is observed and no cross-reactivity with recombinant mouse CD39L3 or recombinant human CD39L4 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>1</sub> Clone # 495826
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse CD39/ENTPD1 Thr38-Ile478 Accession # AAH11278
<b>Conjugate</b>	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Formulation</b>	Supplied 0.2 mg/mL 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	Mouse splenocytes

#### 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>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

#### BACKGROUND

Ectonucleoside triphosphate diphosphohydrolase-1 (NTPDase-1) is an integral membrane protein with an extracellular active site. NTPDase-1 was originally described as CD39, a B lymphocyte cell surface marker (1), but it is also present on the surface of natural killer cells, T cells, and some endothelial cells (2). 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 (3). NTPDase-1 is involved in the processes of thromboregulation and vascular inflammation (4). The administration of soluble NTPDase-1 may have therapeutic applications for the treatment of some vascular and transplantation-associated diseases (5).

#### References:

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

#### PRODUCT SPECIFIC NOTICES

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