

## DESCRIPTION

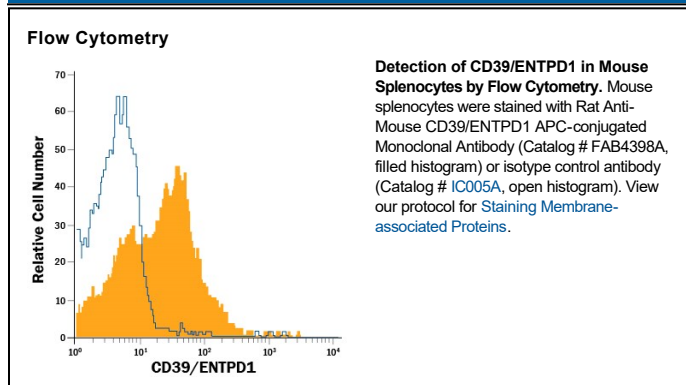
|                           |  |
|---------------------------|--|
| <b>Species Reactivity</b> | Mouse  |
| <b>Specificity</b>        | Detects mouse CD39/ENTPD1 in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human CD39 is observed and no cross-reactivity 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<br>Accession # AAH11278   |
| <b>Conjugate</b>          | Allophycocyanin<br>Excitation Wavelength: 620-650 nm<br>Emission Wavelength: 660-670 nm  |
| <b>Formulation</b>        | Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.<br><br>*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.

|                       | Recommended Concentration       | Sample    |
|-----------------------|---------------------------------|-----------|
| <b>Flow Cytometry</b> | 0.25-1 µg/10 <sup>6</sup> cells | See Below |

## DATA



## 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 (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.