

Recombinant Protein Technical Manual Recombinant Mouse CD39/ENTPD1 Protein (His Tag) RPES1812

**Product Data:** 

Product SKU: RPES1812

Species: Mouse

**Size:** 10µg

Expression host: Human Cells

Uniprot: P55772

| Protei | n Intor | mation |
|--------|---------|--------|
|        |         | mation |

| Molecular Mass:    | 50.5 kDa  |
|--------------------|---|
| AP Molecular Mass: | 60-90 kDa   |
| Tag:               | C-His   |
| Bio-activity:      |   |
| Purity:            | > 95% as determined by reducing SDS-PAGE.   |
| Endotoxin:         | < 1.0 EU per $\mu g$ as determined by the LAL method.   |
| Storage:           | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.  |
| Shipping:          | This product is provided as liquid. It is shipped at frozen temperature with blue ice. Upon receipt, store it immediately at<-20°C.   |
| Formulation:       | Supplied as a 0.2 μm filtered solution of 20mM Tris,500mM<br>NaCl,10%Glycerol,pH7.4.  |
| Reconstitution:    | Please refer to the printed manual for detailed information.  |
| Application:       |   |
| Synonyms:          | Ectonucleoside triphosphate diphosphohydrolase 1; NTPDase 1; NTPDase 1; Ecto-<br>ATP diphosphohydrolase 1; Ecto-ATPDase 1; Ecto-ATPase 1; Ecto-apyrase;<br>Lymphoid cell activation antigen; CD39 |

## Sequence: Thr38-Ile478

## Background:

Ectonucleoside triphosphate diphosphohydrolase(NTPDase)is an integral membrane protein with an extracellular active site. Recombinant mouse NTPDasewasexpressed as a protein lacking its N- andC-terminaltransmembrane domains, resulting in the secretion of the soluble ectodomain. NTPDasewas originally describedas CD39, a B lymphocyte cell surface marker. but it is also present on the surface of natural killer cells, T cells, and some endothelial cells. NTPDase1hydrolyzes the β-andγ phosphate residues of nucleotides, preferring ATP as the substrate. Through its hydrolysis of extracellular nucleotides, NTPDaseplays arole in the regulation of purinergic signaling. NTPDaseis involved in the processes of thromboregulation and vascular inflammation. The administration ofsoluble NTPDasemay have therapeutic applications for the treatment of some vascular and transplantation-associateddiseases.