

## Recombinant Mouse CD39/ENTPD1 Protein (His Tag)

**Catalog No.** PKSM041341

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

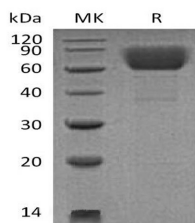
### Description

<b>Synonyms</b>	Ectonucleoside triphosphate diphosphohydrolase 1;NTPDase 1;NTPDase 1;Ecto-ATP diphosphohydrolase 1;Ecto-ATPDase 1;Ecto-ATPase 1;Ecto-apyrase;Lymphoid cell activation antigen;CD39
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Thr38-Ile478
<b>Accession</b>	P55772
<b>Calculated Molecular Weight</b>	50.5 kDa
<b>Observed molecular weight</b>	60-90 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 500mM NaCl, 10% Glycerol, pH 7.4.
<b>Reconstitution</b>	Not Applicable

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Ectonucleoside triphosphate diphosphohydrolase-1 (NTPDase-1) is an integral membrane protein with an extracellular active site. Recombinant mouse NTPDase-1 was expressed as a protein lacking its N- and C-terminal transmembrane domains, resulting in the secretion of the soluble ectodomain. NTPDase-1 was originally described as CD39, a B

### For Research Use Only

lymphocyte cell surface marker, but it is also present on the surface of natural killer cells, T cells, and some endothelial cells. NTPDase1 hydrolyzes the  $\beta$ - and  $\gamma$  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. NTPDase-1 is involved in the processes of thromboregulation and vascular inflammation. The administration of soluble NTPDase-1 may have therapeutic applications for the treatment of some vascular and transplantation-associated diseases.