

## Recombinant Human ENTPD1, His-tagged

Cat. No. ENTPD1-189H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human ENTPD1(Thr38-Val478), fused with His tag at C-terminal, was expressed in Baculovirus-Insect Cells.

**Species** Human

**Source** Insect Cells

**ProteinLength** Thr38-Val478

**Description** CD39, also known as ENTPD1, belongs to the GDA1/CD39 NTPase family. It is expressed primarily on activated lymphoid cells and can also be detected in endothelial tissues. The vascular isoform and the placental isoform II are present in both placenta and umbilical vein, whereas placental isoform I is present in placenta only. CD39 can hydrolyze both nucleoside triphosphates and diphosphates. It is the dominant ecto nucleotidase of vascular and placental trophoblastic tissues and appears to modulate the functional expression of type 2 purinergic (P2) G protein coupled receptors (GPCRs). CD39 transgenic mice exhibit impaired platelet aggregation, prolonged bleeding times, and resistance to systemic thromboembolism. There is a correlation between ATP hydrolysis and triglycerides in patients with chronic heart disease, suggesting a relationship between ATP diphosphohydrolase and thrombogenesis. In the nervous system, CD39 could hydrolyze ATP and other nucleotides to regulate purinergic neurotransmission.

**Predicted N Terminal** Thr 38

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<b>Form</b>	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 8.1. Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization.
<b>Molecular Mass</b>	The recombinant human ENTPD1 consists 452 amino acids and predicts a molecular mass of 51.8 kDa.
<b>Endotoxin</b>	<1.0 EU per µg protein as determined by the LAL method.
<b>Purity</b>	> 90 % as determined by SDS-PAGE.
<b>Stability</b>	Samples are stable for up to twelve months from date of receipt at -70°C.
<b>Storage</b>	Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution. Centrifuge the vial at 4°C before opening to recover the entire contents.

## GENE INFORMATION

<b>Gene Name</b>	ENTPD1 ectonucleoside triphosphate diphosphohydrolase 1 [ Homo sapiens ]
<b>Official Symbol</b>	ENTPD1
<b>Synonyms</b>	ENTPD1; ectonucleoside triphosphate diphosphohydrolase 1; CD39; ATPDase; NTPDase 1; CD39 antigen; ecto-apyrase; ecto-ATPase 1; ecto-ATPDase 1; ecto-ATP diphosphohydrolase 1; lymphoid cell activation antigen; NTPDase-1; FLJ40921; FLJ40959; DKFZp686D194; DKFZp686I093;
<b>Gene ID</b>	953

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<b>mRNA Refseq</b>	NM_001776
<b>Protein Refseq</b>	NP_001767
<b>MIM</b>	601752
<b>UniProt ID</b>	P49961
<b>Chromosome Location</b>	10q23.1-q24.1
<b>Pathway</b>	Purine metabolism, organism-specific biosystem; Purine metabolism, conserved biosystem; Pyrimidine metabolism, organism-specific biosystem; Pyrimidine metabolism, conserved biosystem;
<b>Function</b>	ATP binding; hydrolase activity; nucleoside-diphosphatase activity; nucleoside-triphosphatase activity; nucleotide binding;

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