

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD39L3/ENTPD3 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse CD39L3 is observed, and less than 2% cross-reactivity with recombinant human (rh) CD39L1 and rhCD39 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD39L3/ENTPD3 Gln44-Pro485 Accession # O75355
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

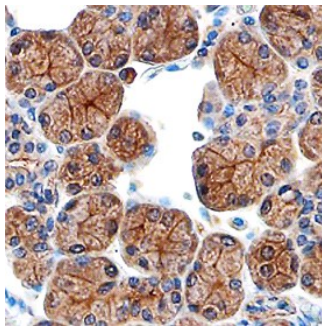
APPLICATIONS

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
Western Blot	0.1 µg/mL	Recombinant Human CD39L3/ENTPD3 (Catalog # 4400-EN)
Immunohistochemistry	5-15 µg/mL	See Below

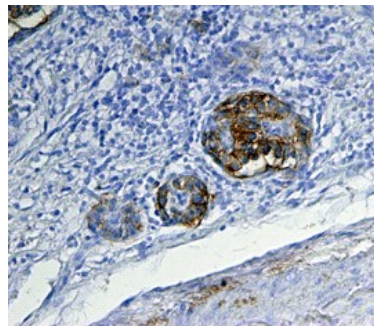
DATA

Immunohistochemistry



CD39L3/ENTPD3 in Human Salivary Gland. CD39L3/ENTPD3 was detected in immersion fixed paraffin-embedded sections of human salivary gland using Sheep Anti-Human CD39L3/ENTPD3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4400) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to the plasma membranes of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Immunohistochemistry



CD39L3/ENTPD3 in Human Pancreas. CD39L3/ENTPD3 was detected in immersion fixed paraffin-embedded sections of human pancreas using Sheep Anti-Human CD39L3/ENTPD3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4400) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to pancreatic islets. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Ectonucleoside triphosphate diphosphohydrolase-3 (NTPDase-3), encoded by the ENTPD3 gene and also known as CD39L3, is an integral membrane protein with an extracellular active site (1). Recombinant human NTPDase-3 was expressed as a protein lacking its N- and C-terminal transmembrane domains, resulting in the secretion of the soluble ectodomain. NTPDase-3 hydrolyzes the β- and γ-phosphate residues of nucleotides, preferring ATP, ADP, UTP, and UDP as substrates (1). Through its hydrolysis of extracellular nucleotides, NTPDase-3 plays a role in the regulation of purinergic signaling (2). The enzyme is expressed at its highest levels in brain, pancreas, spleen and prostate tissues (3).

References:

1. Lavoie, E.G. *et al.* (2004) *Biochem. Pharmacol.* **67**:1917.
2. Crawford, P.A. *et al.* (2007) *Arch. Biochem. Biophys.* **457**:7.
3. Chadwick, B.P. and A.M. Frischauf (1998) *Genomics* **50**:357.