### For Research Use Only

# CD39/ENTPD1 Polyclonal antibody

Catalog Number:19229-1-AP 9 Publications



**Basic Information** 

Catalog Number:

19229-1-AP

GenBank Accession Number:

BC047664

GeneID (NCBI): Size:

150ul, Concentration: 240 µg/ml by

Nanodrop and 200  $\mu g/ml$  by Bradford UNIPROT ID: method using BSA as the standard; P49961

Source: Full Name:

Rabbit ectonucleoside triphosphate Isotype: diphosphohydrolase 1

Calculated MW:

Immunogen Catalog Number: 58 kDa AG6165

Observed MW: 75-95 kDa

Antigen affinity purification Recommended Dilutions:

WB 1:500-1:2000

**Purification Method:** 

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:20-1:200

**Applications** 

**Tested Applications:** 

WB, IP, IF, IHC, ELISA

**Cited Applications:** WB, IHC, IF

Species Specificity:

human, mouse, rat

**Cited Species:** 

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: mouse liver tissue, HL-60 cells, mouse brain

tissue, human liver tissue

IP: mouse liver tissue.

IHC: human placenta tissue, human liver tissue,

human tonsillitis tissue

# **Background Information**

ENTPD1(Ectonucleoside triphosphate diphosphohydrolase 1) is also named CD39, NTPDase 1, and Ecto-ATPDase 1 and belongs to the GDA 1/CD39 NTPase family. In the nervous system, it can hydrolyze ATP and other nucleotides to regulate purinergic neurotransmission. It is a noncovalent tetrameric protein and detergent inhibition of enzymatic activity is caused by dissociation of ectoapyrase tetramers into monomers(PMID: 9733785). And it is a 70- to 100kDa protein that is heavily N-glycosylated(PMID:7930580). It has 3 isoforms produced by alternative splicing. CD39 preferentially occurred as a dimer that could be dissociated into monomeric forms. (PMID: 12694193). The soluble isoform of CD39(38-478 amino acid) is located in the extracellular part and 19229-1-AP recognizes both the 3 isoforms and the soluble form of CD39 (38-478aa) molecule.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Wenjia Liu	30210899	Bone Res	WB
Yunshuo Zhao	34648290	J Chem Inf Model	FC
Hao Cui	36436019	Cancer Immunol Immunother	WB,IHC

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact: T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free

in USA), or 1(312) 455-8498 (outside USA)

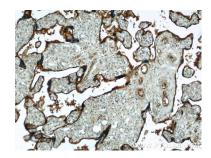
E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

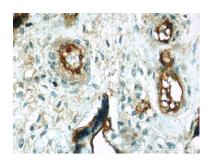
## **Selected Validation Data**



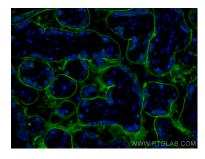
mouse liver tissue were subjected to SDS PAGE followed by western blot with 19229-1-AP (CD39 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



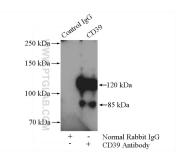
Immunohistochemical analysis of paraffinembedded human placenta using 19229-1-AP (CD39 antibody) at dilution of 1:50 (under 10x lens).



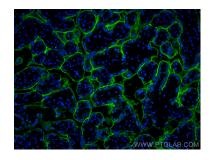
Immunohistochemical analysis of paraffinembedded human placenta using 19229-1-AP (CD39 antibody) at dilution of 1:50 (under 40x lens)



Immunofluorescent analysis of (4% PFA) fixed human placenta tissue using CD39/ENTPD1 antibody (19229-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L).



IP result of anti-CD39/ENTPD1 (IP:19229-1-AP, 4ug; Detection:19229-1-AP 1:800) with mouse liver tissue lysate 4000ug.



Immunofluorescent analysis of (4% PFA) fixed human placenta tissue using CD39/ENTPD1 antibody (19229-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L).