For Research Use Only

CD39/ENTPD1 Monoclonal antibody

Catalog Number: 60323-1-lg



Basic Information

Catalog Number: GenBank Accession Number:

60323-1-lg BC047664
Size: GeneID (NCBI):

150ul , Concentration: 1300 µg/ml by $\,953$ Nanodrop and 1000 µg/ml by $Bradford_{\hbox{\it Full Name}}$

method using BSA as the standard; ectonucleoside triphosphate

Source: diphosphohydrolase 1
Mouse Calculated MW:
Isotype: 58 kDa
IgG2a Observed MW:

Immunogen Catalog Number: 54 kDa

AG6165

Purification Method: Protein A purification

CloneNo.: 2D2H6

Recommended Dilutions:

WB 1:500-1:1000 IHC 1:50-1:500 IF 1:20-1:200

Applications

Tested Applications:

FC, IF, IHC, WB, ELISA

Species Specificity:

huma

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: Jurkat cells, human placenta tissue

IHC: human placenta tissue,

IF: HeLa cells,

Background Information

ENTPD1(Ectonucleoside triphosphate diphosphohydrolase 1) is also named as CD39, NTPDase 1, Ecto-ATPDase 1 and belongs to the GDA1/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 that detergent inhibition of enzymatic activity is caused by dissociation of ectoapyrase tetramers into monomers(PMID: 9733785). And it is a 70- to 100-kDa protein that is heavily N-glycosylated(PMID:7930580). This protein has 6 glycosylation sites and 3 isoforms(58 kDa, 59 kDa and 34 kDa) produced by alternative splicing. The soluble isoform of CD39(38-478 amino acid) locates to the extracellular part and 60323-1-Ig can recognize the soluble form of CD39 (38-478aa) molecule.

Storage

Storage:

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

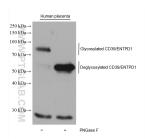
Storage Buffer:

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

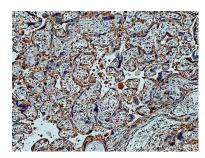
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

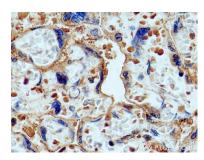
Selected Validation Data



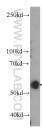
Various lysates were subjected to SDS PAGE followed by western blot with 60323-1-lg (CD39/ENTPD1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



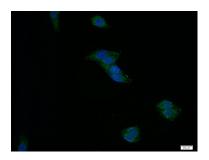
Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 60323-1-Ig (CD39/ENTPD1 antibody) at dilution of 1:100 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



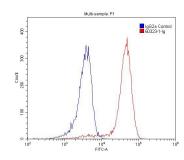
Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 60323-1-Ig (CD39/ENTPD1 antibody) at dilution of 1:100 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Jurkat cells were subjected to SDS PAGE followed by western blot with 60323-1-1g (ENTPD1 Antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of HeLa cells using 60323-1-Ig (ENTPD1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).



1X10^6 Jurkat cells were stained with 0.2ug ENTPD1 antibody (60323-1-lg, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1500.