For Research Use Only

CD13 Polyclonal antibody

Catalog Number: 14553-1-AP 14 Publications



Basic Information

Catalog Number: 14553-1-AP

Immunogen Catalog Number:

Size:

BC058928 GeneID (NCBI): 290

GenBank Accession Number:

500 ug/ml ENSEMBL Gene ID: Source: Rabbit ENSG00000166825 **UNIPROT ID:** Isotype: P15144

AG5976 alanyl (membrane) aminopeptidase

> Calculated MW: 110 kDa Observed MW: 150 kDa

Full Name:

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications: WB, IHC, IF, IP Species Specificity: human, mouse, rat **Cited Species:**

human, mouse, rat, pig, rabbit, canine, monkey

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: HepG2 cells, human liver tissue, human kidney tissue, PC-3 cells, THP-1 cells, mouse kidney tissue, mouse liver tissue

Purification Method:

WB 1:1000-1:8000 IHC 1:50-1:500

IF/ICC 1:200-1:800

IF-P 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

IHC: human tonsillitis tissue, human colon tissue, human kidney tissue

IF-P: mouse kidney tissue, IF/ICC: HEK-293 cells,

Background Information

CD13, also named as APN, ANPEP(aminopeptidase N) or PEPN, is belongs to the peptidase M1 family. CD13 is a heavily glycosylated, ~150-240 kDa, type-II membrane, expressed by most cells of myeloid origin including monocytes, macrophages, granulocytes, and their hematopoietic precursors. It is also abundantly expressed in the brush border of epithelial cells from renal proximal tubules and small intestine, in prostatic epithelial cells, in bile duct canaliculi, in mast cells, and, in some cases, in fibroblasts and smooth muscle cells. CD13 is a multifunctional protein and plays varying roles in cell migration, cell proliferation, cell differentiation and so on. CD13 participates in angiogenesis generating and modulating angiogenic signals, and can be a marker of angiogenic vessels. CD13 is also a pan-myeloid marker, present on mature granulocytes and monocytes. (PMID: 8805662, 10098327, 18603472, 18097955, 17897790, 17888402, 21339174)

Notable Publications

Author	Pubmed ID	Journal	Application
Shion Osana	33091420	Exp Cell Res	IF
Yang Gu	34649567	Mol Cancer	WB
Weizhi Wang	25370073	Anal Chem	

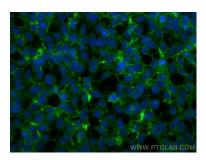
Storage

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

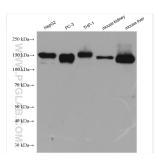
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



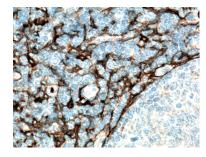
Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using CD13 antibody (14553-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



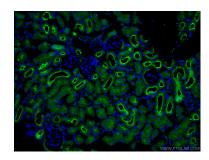
Various lysates were subjected to SDS PAGE followed by western blot with 14553-1-AP (CD13 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 14553-1-AP (CD13 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 14553-1-AP (CD13 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse kidney tissue using 14553-1-AP (CD13 antibody) at dilution of 1:50 and CoraLite488-Conjugated Goat Anti-Rabbit IgG(H+L).