For Research Use Only

CD13 Polyclonal antibody

Catalog Number: 14553-1-AP

9 Publications



Basic Information

Catalog Number: 14553-1-AP

BC058928

Antigen affinity purification

Size:

GeneID (NCBI): 290

Recommended Dilutions:

500 μg/ml Source:

ENSEMBL Gene ID: ENSG00000166825

GenBank Accession Number:

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

Purification Method:

Rabbit Isotype:

AG5976

UNIPROT ID: P15144

Full Name: Immunogen Catalog Number:

alanyl (membrane) aminopeptidase

Calculated MW: 110 kDa Observed MW: 150 kDa

Applications

Tested Applications:

FC, IF/ICC, IHC, WB, ELISA

Cited Applications:

IF, IHC, IP, WB

Species Specificity: human, mouse, rat

Cited Species:

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

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

IHC: human tonsillitis tissue, human colon tissue.

human kidney tissue

IF: mouse kidney tissue,

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 $duct\ can a liculi, in\ mast\ cells,\ and,\ in\ some\ cases, in\ fibroblasts\ and\ smooth\ muscle\ cells.\ CD13\ is\ a\ multifunctional$ 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

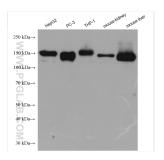
Storage:

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

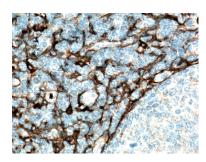
Selected Validation Data



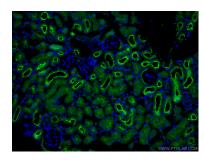
Various lysates were subjected to SDS PAGE followed by western blot with 14553-1-AP (CD13 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



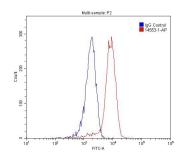
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 14553-1-AP (CD13 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 HEK-293 cells were stained with 0.2ug CD13 antibody (14553-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500