

CD13 Monoclonal antibody

Catalog Number: 66211-1-Ig 11 Publications

Basic Information

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| Catalog Number: 66211-1-Ig | GenBank Accession Number: BC058928 | Purification Method: Protein A purification |
| Source: Mouse | GeneID (NCBI): 290 | CloneNo.: 2D8D11 |
| Isotype: IgG2a | ENSEMBL Gene ID: ENSG00000166825 | Recommended Dilutions: WB: 1:3000-1:8000 IHC: 1:5000-1:20000 IF-P: 1:200-1:800 IF/ICC: 1:400-1:1600 |
| Immunogen Catalog Number: AG5976 | UNIPROT ID: P15144 | |
| | Full Name: alanyl (membrane) aminopeptidase | |
| | Calculated MW: 110 kDa | |
| | Observed MW: 150 kDa | |

Applications

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| Tested Applications: WB, IHC, IF/ICC, IF-P, ELISA | Positive Controls: |
| Cited Applications: WB, IHC, IF | WB: U-937 cells, |
| Species Specificity: human, mouse, rat | IHC: human kidney tissue, human tonsillitis tissue, mouse kidney tissue, rat kidney tissue |
| Cited Species: human, mouse, rat | IF-P: mouse kidney tissue, human kidney tissue |
| | IF/ICC: THP-1 cells, |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

Background Information

CD13, also named as APN, ANPEP (aminopeptidase N) or PEPN, is belongs to the peptidase M-1 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 |
|-----------------|-----------|---------------------|-------------|
| Kelly A Servage | 32382024 | Sci Rep | WB |
| Junxia Cao | 30809310 | Theranostics | IHC |
| Junnian Wei | 31792071 | Mol Cell Proteomics | WB |

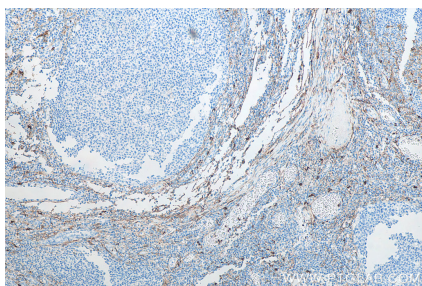
Storage

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

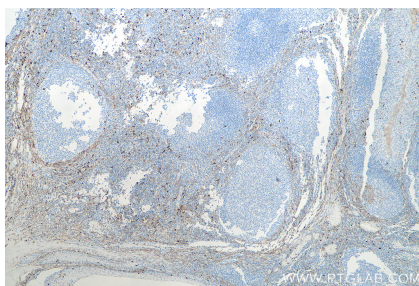
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

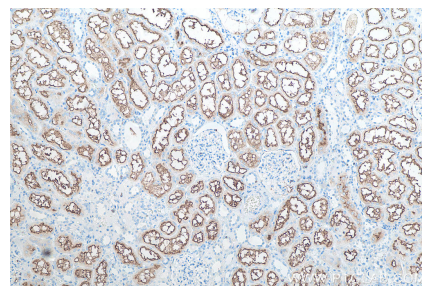
Selected Validation Data



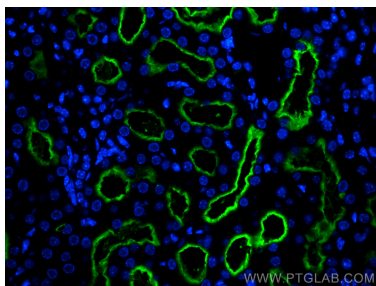
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66211-1-Ig (CD13 antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



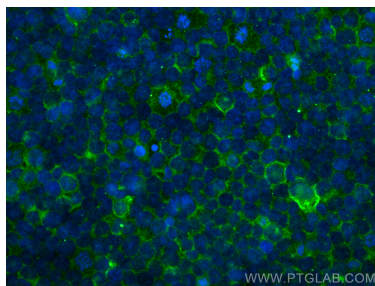
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66211-1-Ig (CD13 antibody) at dilution of 1:10000 (under 4x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



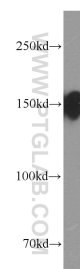
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 66211-1-Ig (CD13 antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



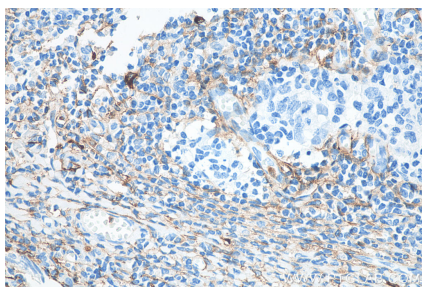
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse kidney tissue using CD13 antibody (66211-1-Ig, Clone: 2D8D11) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



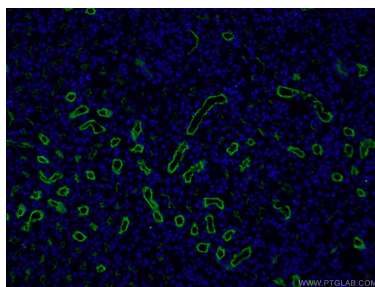
Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using CD13 antibody (66211-1-Ig, Clone: 2D8D11) at dilution of 1:800 and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



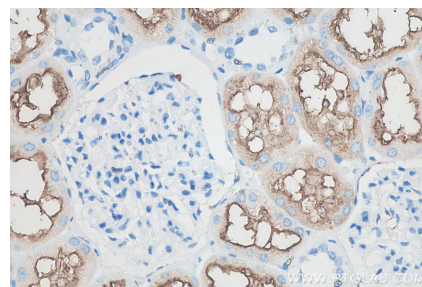
U-937 cells were subjected to SDS PAGE followed by western blot with 66211-1-Ig (CD13 antibody at dilution of 1:4000 incubated at room temperature for 1.5 hours.



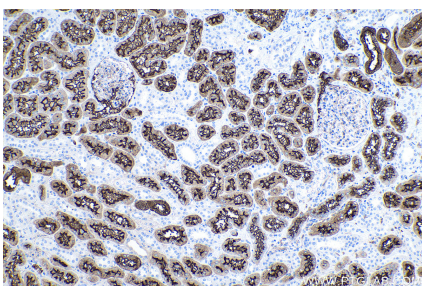
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66211-1-Ig (CD13 antibody) at dilution of 1:10000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using 66211-1-Ig (CD13 antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 66211-1-Ig (CD13 antibody) at dilution of 1:10000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 66211-1-Ig (CD13 antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).