For Research Use Only

## Neprilysin/CD10 Recombinant antibody

Catalog Number:84181-1-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

84181-1-RR BC101658 Protein A purification GeneID (NCBI): CloneNo.:

100ul , Concentration: 1000  $\mu g/ml$  by 4311 241322A8

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Source P08473 WB 1:5000-1:50000 Rabbit IHC 1:500-1:2000 Full Name: IF-P 1:200-1:800

Isotype: membrane metallo-endopeptidase IgG Calculated MW:

750 aa, 86 kDa Observed MW: 100 kDa

**Applications** 

**Tested Applications:** WB, IHC, IF-P, ELISA

Species Specificity: 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 kidney tissue, Raji cells, rat kidney tissue

**Purification Method:** 

IHC: human tonsillitis tissue, IF-P: mouse kidney tissue,

## **Background Information**

CD10, also known as neprilysin, membrane metallo-endopeptidase (MME), neutral endopeptidase (NEP), or common acute lymphoblastic leukemia antigen (CALLA), is a 100-kDa type II transmembrane glycoprotein belonging to peptidase M13 family (PMID: 7760013; 8102558). Among hematopoietic cells, CD10 is expressed on granulocytes, B cell precursors, mature germinal center B cells, a subset of immature thymocytes (PMID: 13679451). CD10 is also expressed on a variety of nonhematopoietic cell types, including bronchial epithelial cells, cultured fibroblasts, bone marrow stromal cells, renal proximal tubular epithelial cells, breast myoepithelium, biliary canaliculi (PMID: 8102558). CD10 is a cell surface peptidase that cleaves peptide bonds on the amino side of hydrophobic amino acids and inactivates a variety of physiologically active peptides. Loss or decreases in CD10 expression have been reported in a variety of malignancies (PMID: 16054017).

Storage

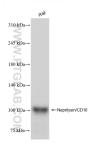
Store at -20°C. Stable for one year after shipment.

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

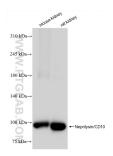
\*\*\* 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

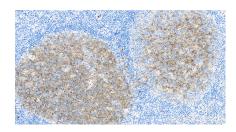
## **Selected Validation Data**



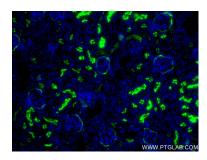
Raji cells were subjected to SDS PAGE followed by western blot with 84181-1-RR (Neprilysin/CD10 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



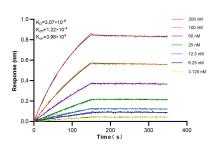
Various lysates were subjected to SDS PAGE followed by western blot with 84181-1-RR (Neprilysin/CD10 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 84181-1-RR (Neprilysin/CD10 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse kidney tissue using Neprilysin/CD10 antibody (84181-1-RR, Clone: 241322A8) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 84181-1-RR against Human Neprilysin/CD10 were performed. The affinity constant is 3.07 nM.