

For Research Use Only

# Neprilysin/CD10 Recombinant antibody

Catalog Number: 84181-1-RR



## Basic Information

<b>Catalog Number:</b> 84181-1-RR	<b>GenBank Accession Number:</b> BC101658	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 4311	<b>CloneNo.:</b> 241322A8
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P08473	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF-P 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> membrane metallo-endopeptidase	
	<b>Calculated MW:</b> 750 aa, 86 kDa	
	<b>Observed MW:</b> 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

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

### 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

For technical support and original validation data for this product please contact:

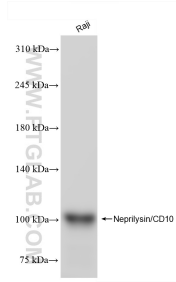
T: 4006900926

E: Proteintech-CN@ptglab.com

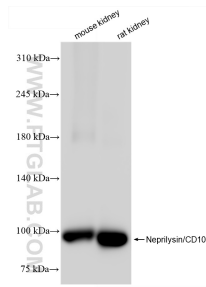
W: ptgcn.com

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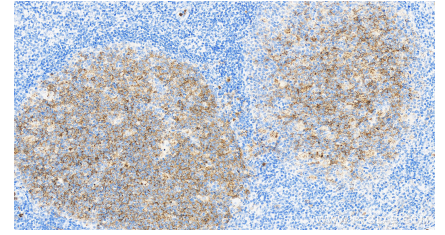
## Selected Validation Data



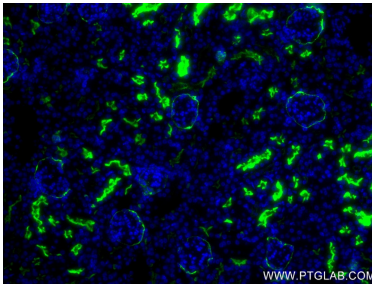
Raji cells were subjected to SDS PAGE followed by western blot with 84181-1-RR (Neprilysin/CD10 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



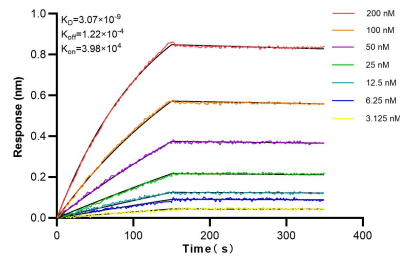
Various lysates were subjected to SDS PAGE followed by western blot with 84181-1-RR (Neprilysin/CD10 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded 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 CoralLite®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.