## For Research Use Only

Neprilysin/CD10 Polyclonal antibody

Catalog Number:23898-1-AP 4 Publications

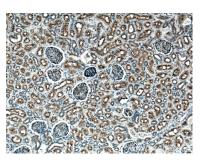
Antibodies | ELISA kits | Proteins www.ptglab.com

| Basic Information               | Catalog Number:<br>23898-1-AP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | GenBank Accession Nu<br>BC101658                                                                                                                                                                                                             | mber:                                                                                                         | Purification Method:<br>Antigen affinity purification                                                                                                                                                                               |  |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                 | Size:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | GenelD (NCBI):<br>4311                                                                                                                                                                                                                       |                                                                                                               | Recommended Dilutions:<br>WB 1:500-1:2000<br>IHC 1:50-1:500<br>IF-P 1:50-1:500<br>IF/ICC 1:400-1:1600                                                                                                                               |  |
|                                 | 150ul, Concentration: 800 ug/ml by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                              |                                                                                                               |                                                                                                                                                                                                                                     |  |
|                                 | Nanodrop and 447 ug/ml by Bradford<br>method using BSA as the standard;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                              |                                                                                                               |                                                                                                                                                                                                                                     |  |
|                                 | Source:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                              |                                                                                                               |                                                                                                                                                                                                                                     |  |
|                                 | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                              |                                                                                                               |                                                                                                                                                                                                                                     |  |
|                                 | Isotype:<br>IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Calculated MW:<br>750 aa, 86 kDa                                                                                                                                                                                                             |                                                                                                               |                                                                                                                                                                                                                                     |  |
|                                 | Immunogen Catalog Number:<br>AG20963                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Observed MW:<br>90-110 kDa                                                                                                                                                                                                                   |                                                                                                               |                                                                                                                                                                                                                                     |  |
| Applications                    | Tested Applications:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                              | Positive Controls:                                                                                            |                                                                                                                                                                                                                                     |  |
|                                 | WB, IHC, IF/ICC, IF-P, ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                              | WB : mouse kidney tissue, human kidney tissue, rat<br>kidney tissue<br>IHC : human kidney tissue,             |                                                                                                                                                                                                                                     |  |
|                                 | Cited Applications:<br>WB, IF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                              |                                                                                                               |                                                                                                                                                                                                                                     |  |
|                                 | Species Specificity:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                              |                                                                                                               |                                                                                                                                                                                                                                     |  |
|                                 | human, mouse, rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                              | IF-P: mouse k                                                                                                 | idney tissue,                                                                                                                                                                                                                       |  |
|                                 | Cited Species:<br>human, mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                              | IF/ICC : Ramo                                                                                                 | : Ramos cells,                                                                                                                                                                                                                      |  |
|                                 | Note-IHC: suggested antigen r<br>TE buffer pH 9.0; (*) Alternativ<br>retrieval may be performed w<br>buffer pH 6.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | vely, antigen                                                                                                                                                                                                                                |                                                                                                               |                                                                                                                                                                                                                                     |  |
| Background Information          | CD10, also known as neprilysin, membrane metallo-endopeptidase (MME), neutral endopeptidase (NEP), or commor<br>acute lymphoblastic leukemia antigen (CALLA), is a 100-kDa type II transmembrane glycoprotein belonging to<br>peptidase M13 family (PMID: 7760013; 8102558). Among hematopoietic cells, CD10 is expressed on granulocytes, B<br>cell precursors, mature germinal center B cells, a subset of immature thymocytes (PMID: 13679451). CD10 is also<br>expressed on a variety of nonhematopoietic cell types, including bronchial epithelial cells, cultured fibroblasts,<br>bone marrow stromal cells, renal proximal tubular epithelial cells, breast myoepithelium, biliary canaliculi (PMID:<br>8102558). CD10 is a cell surface peptidase that cleaves peptide bonds on the amino side of hydrophobic amino<br>acids and inactivates a variety of physiologically active peptides. Loss or decreases in CD10 expression have been<br>reported in a variety of malignancies (PMID: 16054017). |                                                                                                                                                                                                                                              |                                                                                                               |                                                                                                                                                                                                                                     |  |
|                                 | cell precursors, mature germinal cent<br>expressed on a variety of nonhemato<br>bone marrow stromal cells, renal pro<br>8102558). CD10 is a cell surface pept<br>acids and inactivates a variety of phy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | poietic cell types, incluckimal tubular epithelial<br>kimal tubular epithelial<br>idase that cleaves pepti<br>vsiologically active pep                                                                                                       | ding bronchial<br>cells, breast n<br>de bonds on th                                                           | cytes (PMID: 13679451). CD10 is also<br>epithelial cells, cultured fibroblasts,<br>nyoepithelium, biliary canaliculi (PMID<br>e amino side of hydrophobic amino                                                                     |  |
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| Storage                         | cell precursors, mature germinal cent<br>expressed on a variety of nonhemato<br>bone marrow stromal cells, renal pro<br>8102558). CD10 is a cell surface pept<br>acids and inactivates a variety of phy<br>reported in a variety of malignancies<br>Author Pub<br>Caiyun Li 346<br>Xinliu Zeng 296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | poietic cell types, incluc<br>kimal tubular epithelial<br>idase that cleaves pepti<br>siologically active pept<br>(PMID: 16054017).<br>med ID Journa<br>44519 Bioche<br>69342 Cell PH<br>67256 J Trans<br>er shipment.<br>% glycerol pH 7.3. | ding bronchial<br>cells, breast n<br>de bonds on th<br>tides. Loss or d<br>l<br>m Cell Biol<br>nysiol Biochem | cytes (PMID: 13679451). CD10 is also<br>epithelial cells, cultured fibroblasts,<br>nyoepithelium, biliary canaliculi (PMID<br>e amino side of hydrophobic amino<br>ecreases in CD10 expression have been<br>Application<br>WB<br>IF |  |
| Notable Publications<br>Storage | cell precursors, mature germinal cent<br>expressed on a variety of nonhemato<br>bone marrow stromal cells, renal pro:<br>8102558). CD10 is a cell surface pept<br>acids and inactivates a variety of phy<br>reported in a variety of malignancies<br>Author Pub<br>Caiyun Li 346<br>Xinliu Zeng 296<br>Yi Gong 388<br>Storage:<br>Store at -20°C. Stable for one year aft<br>Storage Buffer:<br>PBS with 0.02% sodium azide and 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | poietic cell types, incluc<br>kimal tubular epithelial<br>idase that cleaves pepti<br>siologically active pept<br>(PMID: 16054017).<br>med ID Journa<br>44519 Bioche<br>69342 Cell PH<br>67256 J Trans<br>er shipment.<br>% glycerol pH 7.3. | ding bronchial<br>cells, breast n<br>de bonds on th<br>tides. Loss or d<br>l<br>m Cell Biol<br>nysiol Biochem | cytes (PMID: 13679451). CD10 is also<br>epithelial cells, cultured fibroblasts,<br>nyoepithelium, biliary canaliculi (PMID<br>e amino side of hydrophobic amino<br>ecreases in CD10 expression have been<br>Application<br>WB<br>IF |  |

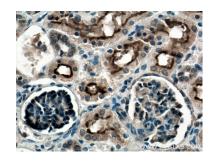
## Selected Validation Data



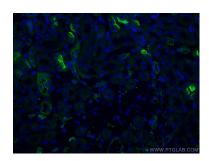
mouse kidney tissue were subjected to SDS PAGE followed by western blot with 23898-1-AP (Neprilysin/CD10 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



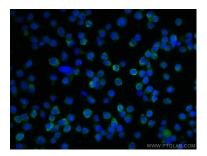
Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 23898-1-AP (Neprilysin/CD10 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 23898-1-AP (Neprilysin/CD10 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 Neprilysin/CD10 antibody (23898-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed Ramos cells using MME,CD10 antibody (23898-1-AP) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).