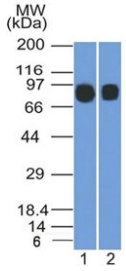
CD10/Neprilysin Antibody [clone MME/1892] (V3878)

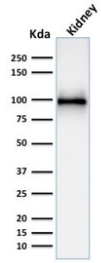
Catalog No.	Formulation	Size
V3878-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3878-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3878SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

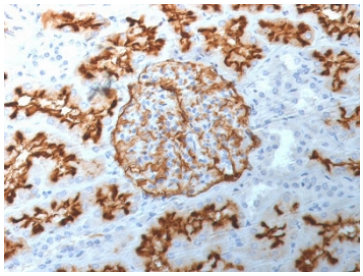
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	MME/1892
Purity	Protein G affinity chromatography
UniProt	P08473
Localization	Cell surface, Cytoplasmic
Applications	ELISA: 2-4ug/ml (order BSA/azide-free format) Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD10/Neprilysin antibody is available for research use only.



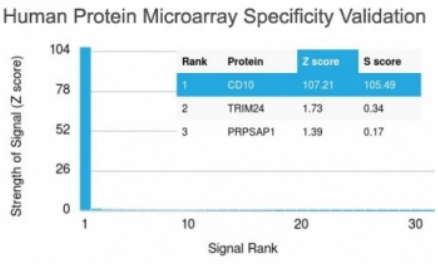
Western blot testing of human 1) Raji and 2) Ramos cell lysate with CD10/Neprilysin antibody (clone MME/1892). Routinely visualized at ~100 kDa.



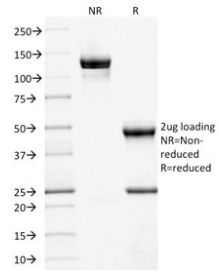
Western blot testing of human kidney lysate with CD10/Neprilysin antibody (clone MME/1892). Routinely visualized at ~100 kDa.



IHC staining of FFPE human kidney with CD10/Neprilysin antibody (clone MME/1892). Required HEIR: boil tissue sections in 10mM Tris with 1mM EDTA, pH 9, for 10-20 min and allow to cool before testing.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD10/Neprilysin antibody (clone MME/1892). These results demonstrate the foremost specificity of the MME/1892 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free CD10/Neprilysin antibody (clone MME/1892) as confirmation of integrity and purity.

Description

CD10/Neprilysin Antibody recognizes Membrane metalloendopeptidase, also known as CD10, Neprilysin, and neutral endopeptidase, a zinc-dependent cell surface metalloprotease encoded by the MME gene. CD10/Neprilysin antibody targets a type II transmembrane glycoprotein that functions as an important regulator of bioactive peptide signaling in multiple tissues. CD10 was originally identified as the common acute lymphoblastic leukemia antigen and remains widely used as a diagnostic marker in hematopathology and surgical pathology.

Membrane metalloendopeptidase is localized predominantly to the plasma membrane, where it enzymatically cleaves and inactivates a variety of biologically active peptides, including enkephalins, natriuretic peptides, substance P, and bradykinin. Through this proteolytic activity, CD10 plays a key role in modulating inflammatory responses, blood pressure regulation, and neuropeptide signaling. In normal tissues, MME expression is observed in renal proximal tubular epithelium, certain lymphoid precursors, endometrial stromal cells, and subsets of epithelial cells in multiple organs.

In diagnostic pathology, CD10/Neprilysin antibody is frequently used to characterize hematologic malignancies and epithelial tumors. CD10 expression is classically associated with precursor B-cell acute lymphoblastic leukemia and

certain germinal center B-cell lymphomas. In solid tumors, CD10 is commonly expressed in renal cell carcinoma, endometrial stromal tumors, and subsets of prostate and breast carcinomas. Membranous staining is typically observed, reflecting the cell surface localization of the protein, although cytoplasmic accentuation may also be present depending on tissue context and fixation conditions.

At the molecular level, Membrane metalloendopeptidase belongs to the neprilysin family of metalloproteases and contains a large extracellular catalytic domain with a zinc-binding motif essential for enzymatic activity. Altered MME expression has been linked to tumor progression, stromal remodeling, and changes in peptide-mediated signaling pathways within the tumor microenvironment. Dysregulation of CD10 may influence cell proliferation, apoptosis, and local immune responses.

CD10/Neprilysin Antibody provides a reliable tool for detecting CD10 expression in research and pathology applications. Clone MME/1892 is designed to identify membranous CD10/Neprilysin expression patterns, supporting studies of hematologic neoplasms, renal pathology, and peptide regulatory mechanisms in normal and neoplastic tissues.

Application Notes

Optimal dilution of the CD10/Neprilysin antibody should be determined by the researcher.

Immunogen

A portion of amino acids 297-483 from the human protein was used as the immunogen for the CD10/Neprilysin antibody.

Storage

Store the CD10/Neprilysin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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