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Anti-CD10/Neprilysin Antibody

Catalog # ABO11776

Product Information

Application	WB, IHC-P
Primary Accession	P08473
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Neprilysin(MME) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4311
Other Names	Neprilysin, 3.4.24.11, Atriopeptidase, Common acute lymphocytic leukemia antigen, CALLA, Enkephalinase, Neutral endopeptidase 24.11, NEP, Neutral endopeptidase, Skin fibroblast elastase, SFE, CD10, MME, EPN
Calculated MW	85514
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Cell membrane; Single-pass type II membrane protein.
Source	Eukaryota
Protein Name	Neprilysin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human CD10 recombinant protein (Position: Y52-W750). Human CD10 shares 94% amino acid (aa) sequences identity with both mouse and rat CD10.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also

	be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the peptidase M13 family.

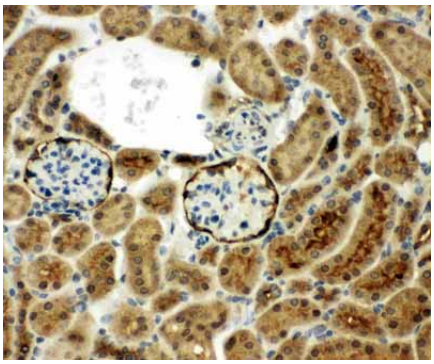
Protein Information

Name	MME {ECO:0000303|PubMed:27588448, ECO:0000312|HGNC:HGNC:7154}
Function	Thermolysin-like specificity, but is almost confined on acting on polypeptides of up to 30 amino acids (PubMed:15283675, PubMed:6208535, PubMed:6349683, PubMed:8168535). Biologically important in the destruction of opioid peptides such as Met- and Leu-enkephalins by cleavage of a Gly-Phe bond (PubMed:17101991, PubMed:6349683). Catalyzes cleavage of bradykinin, substance P and neurotensin peptides (PubMed:6208535). Able to cleave angiotensin-1, angiotensin-2 and angiotensin 1-9 (PubMed:15283675, PubMed:6349683). Involved in the degradation of atrial natriuretic factor (ANF) and brain natriuretic factor (BNP(1-32)) (PubMed:16254193, PubMed:2531377, PubMed:2972276). Displays UV-inducible elastase activity toward skin preelastic and elastic fibers (PubMed:20876573).
Cellular Location	Cell membrane; Single-pass type II membrane protein

Background

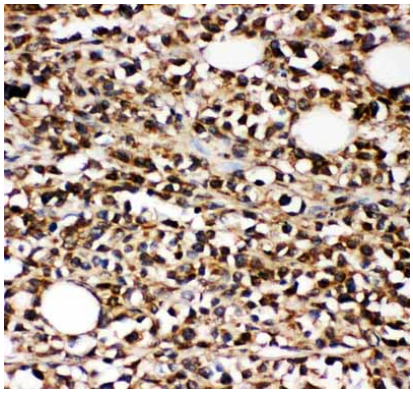
CD10, also known as membrane metallo-endopeptidase, neutral endopeptidase(NEP), Neprilysin, or common acute lymphoblastic leukemia antigen(CALLA), is a zinc-dependent metalloprotease enzyme that degrades a number of small secreted peptides, most notably theamyloid beta peptide whose abnormal misfolding and aggregation in neural tissue has been implicated as a cause of Alzheimer's disease. This gene is localized to human chromosome 3 by study of somatic cell hybrids and regionalized the location to 3q21-q27 by in situ hybridization. By cDNA transfection analysis, CD10 is confirmed as a functional neutral endopeptidase of the type that has previously been called enkephalinase. CD10 has also been called atriopeptidase. Atriopeptidase specifically degrades atrial natriuretic factor. A specific enzyme inhibitor was developed and reported that it had effects similar to those of low-dose ANF infusion. These effects include diuresis, natriuresis, vasodilatation, and suppression of the renin-angiotensin-aldosterone system.

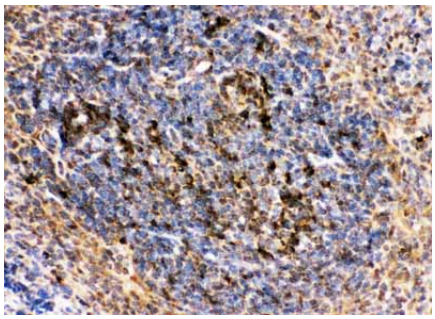
Images



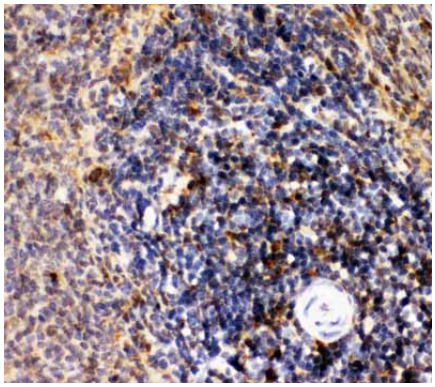
Anti-CD10 Picoband antibody, ABO11776-1.JPGIHC(P): Mouse Kidney Tissue

Anti-CD10 Picoband antibody, ABO11776-2.JPGIHC(P): Human B lymphocyte Cancer Tissue

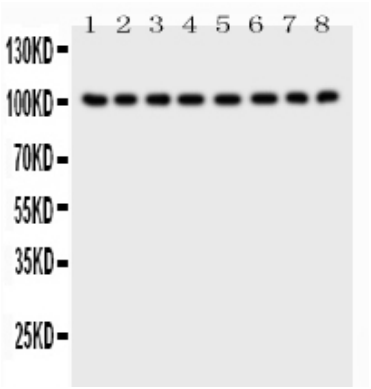




Anti-CD10 Picoband antibody, ABO11776-3.JPGIHC(P): Mouse Spleen Tissue



Anti-CD10 Picoband antibody, ABO11776-4.JPGIHC(P): Rat Spleen Tissue



Anti-CD10 Picoband antibody, ABO11776-5.jpgAll lanes: Anti-CD10(ABO11776) at 0.5ug/mlLane 1: Rat Kidney Tissue Lysate at 40ugLane 2: Rat Brain Tissue Lysate at 40ugLane 3: Rat Liver Tissue Lysate at 40ugLane 4: Human Placenta Tissue Lysate at 40ugLane 5: HELA Whole Cell Lysate at 40ugLane 6: JURKAT Whole Cell Lysate at 40ugLane 7: RAJI Whole Cell Lysate at 40ugLane 8: 293T Whole Cell Lysate at 40ugPredicted bind size: 86KD Observed bind size: 100KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.