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Neprilysin Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7329B

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P08473
Other Accession	P07861, P08049, Q61391
Reactivity	Human
Predicted	Mouse, Rabbit, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18821
Calculated MW	85514
Antigen Region	506-534

Additional Information

Gene ID	4311
Other Names	Neprilysin, Atriopeptidase, Common acute lymphocytic leukemia antigen, CALLA, Enkephalinase, Neutral endopeptidase 2411, NEP, Neutral endopeptidase, Skin fibroblast elastase, SFE, CD10, MME, EPN
Target/Specificity	This Neprilysin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 506-534 amino acids from the C-terminal region of human Neprilysin.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Neprilysin Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

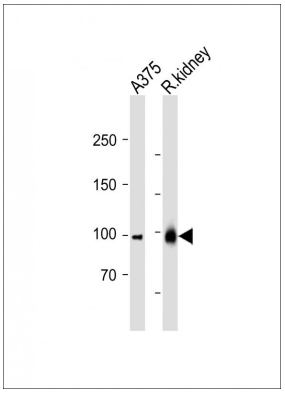
Background

MME is a common acute lymphocytic leukemia antigen that is an important cell surface marker in the diagnosis of human acute lymphocytic leukemia (ALL). This protein is present on leukemic cells of pre-B phenotype, which represent 85% of cases of ALL. This protein is not restricted to leukemic cells, however, and is found on a variety of normal tissues. It is a oprotein that is particularly abundant in kidney, where it is present on the brush border of proximal tubules and on glomerular epithelium. The protein is a neutral endopeptidase that cleaves peptides at the amino side of hydrophobic residues and inactivates several peptide hormones including glucagon, enkephalins, substance P, neurotensin, oxytocin, and bradykinin.

References

Dakka,N., Bellaoui,H. Pediatr Hematol Oncol 26 (4), 216-231 (2009)
Wang,R., Wang,S. J. Neurochem. 108 (4), 1072-1082 (2009)
Shipp,M.A. Proc. Natl. Acad. Sci. U.S.A. 88 (23), 10662-10666 (1991)
Shipp,M.A. Proc. Natl. Acad. Sci. U.S.A. 86 (1), 297-301 (1989)

Images



All lanes: Anti-Neprilysin Antibody (C-term) at 1:2000 dilution Lane 1: A375 whole cell lysate Lane 2: Rat kidney lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 100 KDa Blocking/Dilution buffer: 5% NFDM/TBST.