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MME Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7329c

Product Information

Application	IF, WB, E
Primary Accession	P08473
Other Accession	P07861, Q61391
Reactivity	Human, Rat, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18820
Calculated MW	85514
Antigen Region	274-302

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 MME antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 274-302 amino acids from the Central region of human MME.
Dilution	IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	MME Antibody (Center) 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

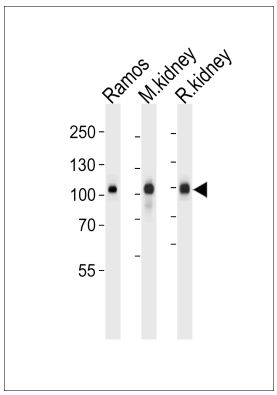
Background

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

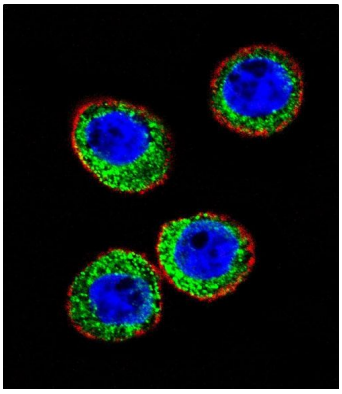
Dakka,N., Bellaoui,H. Pediatr Hematol Oncol 26 (4), 216-231 (2009)
Wang,R., Wang,S. J. Neurochem. 108 (4), 1072-1082 (2009)
Shipp,M.A. Proc. Natl. Acad. Sci. U.S.A. 88 (23), 10662-10666 (1991)
Shipp,M.A. Proc. Natl. Acad. Sci. U.S.A. 86 (1), 297-301 (1989)

Images



Western blot analysis of lysates from Ramos cell line,mouse kidney and rat kidney tissue (from left to right),using Neprilysin Antibody (Center)(Cat. #AP7329c).AP7329c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.

Confocal immunofluorescent analysis of MME Antibody (Center)(Cat#AP7329c) with WiDr cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).



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