

#### MME/CD10 Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM1949b

## **Specification**

#### **MME/CD10** Antibody - Product Information

**Application** IHC, WB,E Primary Accession P08473 Other Accession NP 000893.2 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype IqM,k Calculated MW 85514 Antigen Region 272-300

## MME/CD10 Antibody - 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/CD10 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 272-300 amino acids from human MME/CD10.

#### **Dilution**

IHC~~1:1000 WB~~1:500~1000

## **Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

## **Storage**

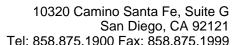
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

MME/CD10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## MME/CD10 Antibody - 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:6349683, PubMed:6208535, PubMed:15283675, PubMed:8168535). Biologically important in the destruction of opioid peptides such as Met- and Leu- enkephalins by cleavage of a Gly-Phe bond (PubMed:6349683, PubMed:17101991). Catalyzes cleavage of bradykinin, substance P and neurotensin peptides (PubMed:6208535). Able to cleave angiotensin-1, angiotensin-2 and angiotensin 1-9 (PubMed:6349683, PubMed:15283675). Involved in the degradation of atrial natriuretic factor (ANF) and brain natriuretic factor (BNP(1-32)) (PubMed:2531377, PubMed:2972276, PubMed:16254193). Displays UV-inducible elastase activity toward skin preelastic and elastic fibers (PubMed:20876573).

#### **Cellular Location**

Cell membrane; Single-pass type II membrane protein

### MME/CD10 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

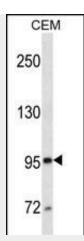
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# MME/CD10 Antibody - Images



Immunohistochemical analysis of paraffin-embedded Human tonsil section using Pink1(Cat#AM1949b). AM1949b was diluted at 1:1000 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.





MME/CD10 (Cat. #AM1949b) western blot analysis in CEM cell line lysates (35μg/lane). This demonstrates the MME/CD10 antibody detected the MME/CD10 protein (arrow).

## MME/CD10 Antibody - Background

This gene encodes 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 glycoprotein 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. This gene, which encodes a 100-kD type II transmembrane glycoprotein, exists in a single copy of greater than 45 kb. The 5' untranslated region of this gene is alternatively spliced, resulting in four separate mRNA transcripts. The coding region is not affected by alternative splicing. [provided by RefSeq].

## **MME/CD10 Antibody - References**

Wang, S., et al. J. Neurochem. 115(1):47-57(2010) Ikenaga, N., et al. Gastroenterology 139(3):1041-1051(2010) Kim, H.S., et al. Histopathology 56(6):708-719(2010) Toussaint, J., et al. PLoS ONE 5 (8) (2010): Cui, L., et al. PLoS ONE 5 (8), E12121 (2010):