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CD10 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1022a

Product Information

Application	IHC, E
Primary Accession	P08473
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2A1H5E1
Isotype	IgG2b
Calculated MW	85514
Description	CD10 is a 100kDa glycoprotein, also designated Common Acute Lymphocytic Leukemia Antigen (CALLA). It is a cell surface enzyme with neutral metalloendopeptidase activity which inactivates a variety of biologically active peptides. CD10 is expressed on the cells of lymphoblastic, Burkitt's, and follicular germinal center lymphomas, and on cells from patients with chronic myelocytic leukemia (CML). It is also expressed on the surface of normal early lymphoid progenitor cells, immature B cells within adult bone marrow and germinal center B cells within lymphoid tissue. CD10 is also present on breast myoepithelial cells, bile canaliculi, fibroblasts, with especially high expression on the brush border of kidney and gut epithelial cells.
Immunogen	Purified recombinant fragment of human CD-10 expressed in E. Coli.
Formulation	Purified antibody in PBS containing 0.03% sodium azide.

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
Dilution	IHC~~1/200 - 1/1000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD10 Antibody 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

References

1．Sato Y,et.al. Journal of Gastroenterology,1996 Feb.31(1):12-7. 2．Inukai T,et.al. British Journal of Haematology,1995,89(3):623-6.

Images

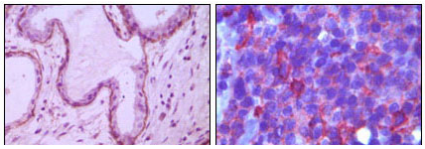


Figure 1: Immunohistochemical analysis of paraffin-embedded human breast ductal myoepithelium (A) and lymph tissue (B), showing cytoplasmic (A) and membrane (B) localization using CD10 mouse mAb with DAB staining (A) and AEC staining (B).

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