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CD10 (Membrane Metalloendopeptidase) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone FR4D11]
Catalog # AH11842

Product Information

Application	IF, FC
Primary Accession	P08473
Other Accession	4311, 307734
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	FR4D11
Calculated MW	85514

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
Application Note	IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD10 (Membrane Metalloendopeptidase) Antibody - With BSA and Azide 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

Recognizes a 100kDa glycoprotein, identified as CD10, also known as 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, Burkittā€™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.

References

Brown, B. et al., J. Natl. Canc. Inst, 55: 1281-1289 (1975). | Tran-Paterson, R. et al., Blood, 76: 775-782 (1990) | Doerken, B. et al., in Knapp, W. et. al. (eds)., Leucocyte Typing IV, Oxford Univ. Press, pp 33-34. | Lavabre-Bertrand, T., et. al., Cytometry, 18: 209-217 (1994). | Guerin S; et al. Cellular Immunology, 1997 Jan 10, 175(1):85-91. | Guerin S; et al. Faseb Journal, 1997 Apr, 11(5):376-81

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