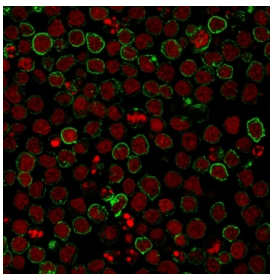
CD10/CALLA Antibody / Membrane metalloendopeptidase [clone CB-CALLA] (V2717)

Catalog No.	Formulation	Size
V2717-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2717-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2717SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

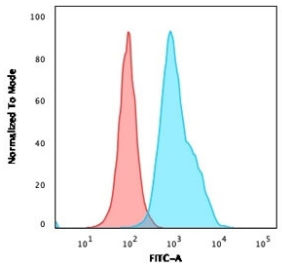
Citations (7)

Bulk quote request

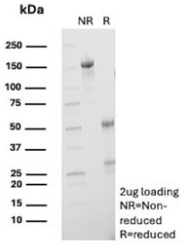
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	CB-CALLA
Purity	Protein G affinity chromatography
UniProt	P08473
Localization	Cell surface, Cytoplasmic
Applications	Flow cytometry: 1-2ug/million cells Immunofluorescence: 1-3ug/ml
Limitations	This CD10/CALLA antibody is available for research use only.



Immunofluorescence analysis of CD10/CALLA antibody in human Ramos cells. CD10/CALLA antibody (clone CB-CALLA) shows membranous staining (green) consistent with cell surface expression of CD10, while nuclei are counterstained with Reddot (red). The staining pattern highlights circumferential membrane localization surrounding individual lymphoma cells, in agreement with known CD10 expression in germinal center-derived B-cell lines.



Flow cytometry staining of human Ramos cells with CD10/CALLA antibody; Red=isotype control, Blue= CD10/CALLA antibody.



SDS-PAGE analysis of purified, BSA-free CD10/CALLA antibody (clone CB-CALLA) as confirmation of integrity and purity.

Description

CD10/CALLA Antibody recognizes Membrane metalloendopeptidase, also known as CD10, Neprilysin, neutral endopeptidase, and the common acute lymphoblastic leukemia antigen, a zinc-dependent cell surface metalloprotease encoded by the MME gene. CD10/CALLA antibody targets a type II transmembrane glycoprotein that serves as a key regulator of bioactive peptide signaling in multiple tissues. The CALLA designation originated from its identification on precursor B-cell acute lymphoblastic leukemia blasts, and CD10 remains a cornerstone marker in hematopathology and surgical pathology panels.

Membrane metalloendopeptidase is localized predominantly to the plasma membrane, where it cleaves and inactivates biologically active peptides such as enkephalins, natriuretic peptides, substance P, and bradykinin. Through this enzymatic activity, CD10 modulates inflammatory signaling, vascular tone, and neuropeptide-mediated pathways. In normal tissues, MME expression is prominent in renal proximal tubular epithelium, germinal center B cells, certain lymphoid precursors, and selected epithelial and stromal cell populations across multiple organs.

In diagnostic practice, CD10/CALLA antibody is widely used to characterize hematologic malignancies and to assist in lymphoma subclassification. CD10 expression is classically associated with precursor B-cell acute lymphoblastic leukemia and germinal center-derived B-cell lymphomas. In solid tumors, CD10 is commonly detected in renal cell carcinoma, endometrial stromal tumors, and subsets of prostate, breast, and other epithelial carcinomas. Membranous staining is typically observed, reflecting the protein's cell surface localization, although cytoplasmic accentuation may be present depending on tissue type and fixation.

At the structural level, Membrane metalloendopeptidase contains a large extracellular catalytic domain with a conserved zinc-binding motif essential for metalloprotease activity. Altered MME expression has been associated with tumor progression, stromal remodeling, and shifts in peptide-mediated signaling within the tumor microenvironment. Dysregulation of CD10 may influence cellular proliferation, differentiation, and local immune responses.

CD10/CALLA Antibody provides a reliable tool for detecting CALLA expression in research and pathology applications. Clone CB-CALLA is designed to identify membranous CD10 staining patterns, supporting studies in hematologic neoplasms, renal pathology, and peptide regulatory mechanisms in normal and neoplastic tissues.

Application Notes

Optimal dilution of the CD10/CALLA antibody should be determined by the researcher.

Immunogen

Recombinant human protein was used as the immunogen for the CD10/CALLA antibody.

Storage

Store the CD10/CALLA antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
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