



1B-209-C025

## Monoclonal Antibody to CD10 Biotin conjugated (0.025 mg)

<b>Clone:</b>	MEM-78
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The antibody MEM-78 reacts with CD10 antigen (CALLA - Common acute lymphatic leukemia antigen), a 100 kDa type II integral membrane protein. HLDA IV; WS Code B 506 HLDA V; WS Code B CD10.4
<b>Immunogen:</b>	NALM-6 human pre-B cell line
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	Biotinylated antibody is designed for indirect immunofluorescence analysis by Flow Cytometry. Suggested working dilution is 1:200. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD10 (neutral endopeptidase &#8211; NEP, common acute lymphocytic leukemia antigen &#8211; CALLA, membrane metallo-endopeptidase &#8211; MME, enkephalinase) is a 100-kDa cell surface zinc metalloprotease cleaving peptide bonds on the N-terminus of hydrophobic amino acids and inactivating multiple physiologically active peptides. CD10 is expressed on various normal cell types, including lymphoid precursor cells, germinal center B lymphocytes, and some epithelial cells, and its expression level serves as a marker for diagnostics of many carcinomas. CD10 is also a differentiation antigen for early B-lymphoid progenitors in the B-cell differentiation pathway and has a key role in regulation of growth, differentiation and signal transduction of many cellular systems.

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****References:**

- \*Suzuki T, Ino K, Kikkawa F, Uehara C, Kajiyama H, Shibata K, Mizutani S: Neutral endopeptidase/CD10 expression during phorbol ester-induced differentiation of choriocarcinoma cells through the protein kinase C- and extracellular signal-regulated kinase-dependent signalling pathway. *Placenta*. 2002 Jul;23(6):475-82.
- \*Yada K, Kashima K, Daa T, Kitano S, Fujiwara S, Yokoyama S: Expression of CD10 in basal cell carcinoma. *Am J Dermatopathol*. 2004 Dec;26(6):463-71.
- \*Braham H, Trimeche M, Ziadi S, Mestiri S, Mokni M, Amara K, Hachana M, Sriha B, Korbi S: CD10 expression by fusiform stromal cells in nasopharyngeal carcinoma correlates with tumor progression. *Virchows Arch*. 2006 Aug;449(2):220-4.
- \*Dall'Era MA, True LD, Siegel AF, Porter MP, Sherertz TM, Liu AY: Differential expression of CD10 in prostate cancer and its clinical implication. *BMC Urol*. 2007 Mar 2;7:3.
- \*Horejsi V, Angelisova P, Bazil V, Kristofova H, Stoyanov S, Stefanova I, Hausner P, Vosecky M, Hilgert I.: Monoclonal antibodies against human leucocyte antigens. II. Antibodies against CD45 (T200), CD3 (T3), CD43, CD10 (CALLA), transferrin receptor (T9), a novel broadly expressed 18-kDa antigen (MEM-43) and a novel antigen of restricted expression (MEM-74). *Folia Biol (Praha)*. 1988;34(1):23-34.
- \*Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989).
- \*Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).
- \*Angelisová P, Drbal K, Horejsí V, Cerný J: Association of CD10/neutral endopeptidase 24.11 with membrane microdomains rich in glycosylphosphatidylinositol-anchored proteins and Lyn kinase. *Blood*. 1999 Feb 15;93(4):1437-9.

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