

T4-209-T025

## Monoclonal Antibody to CD10 APC-Cy<sup>™</sup>7 conjugated (25 tests)

Clone: MEM-78

**Isotype:** Mouse IgG1

Specificity: 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

Regulatory Status: RUO

Immunogen: NALM-6 human pre-B cell line

Species Reactivity: Human

Preparation: The purified antibody is conjugated with tandem dye APC-Cy<sup>™</sup>7 under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

**Usage:** The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10° cells in a suspension.

The content of a vial (0.1 ml) is sufficient for 25 tests.

**Expiration:** See vial label

Lot Number: See vial label

Background: CD10 (neutral endopeptidase – NEP, common acute lymphocytic leukemia

antigen – CALLA, membrane metallo-endopeptidase – MME, enkefalinase) is a 100-kDa cell surface zinc metalloprotease cleaving peptide bonds on the N-terminus of hydrophobic amino acids and inactivating multiple physiologically active peptids. CD10 is expressed on various normal cell types, including lymphoid precursor cells, germinal center B lymhocytes, 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.



## PRODUCT DATA SHEET

## 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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