

TECHNICAL DATA SHEET

CyFlow™ CD10 PE-Cy7 Anti-Hu; Clone MEM-78

REF BD638884

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD10
Alternative Names	CALLA, NEP, gp100
Clone	MEM-78
Clonality	monoclonal
Format	PE-Cy7
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	NALM-6 human pre-B cell line

Specificity

The mouse monoclonal antibody MEM-78 recognizes CD10 antigen, a 100 kDa type II integral membrane protein.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD10 (neutral endopeptidase - NEP, common acute lymphocytic leukemia antigen - CALLA, membrane metallo-endopeptidase - 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.

References

- Horejsí V, Angelisová P, Bazil V, Kristofová H, Stoyanov S, Stefanová I, Hausner P, Vosecký 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. < PMID: 2968928 >
- Knapp W, Dorken B, Gilks W, Rieber EP, Schmidt RE, Stein H, von dem Borne AEGK (Eds): Leucocyte Typing IV. Oxford University Press, Oxford. 1989; 1-1820. < NLM ID: 8914679 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- Doussis IA, Gatter KC, Mason DY: CD68 reactivity of non-macrophage derived tumours in cytological specimens. J Clin Pathol. 1993 Apr; 46(4):334-6. < PMID: 7684403 >
- Angelisová P, Drbal K, Cerny J, Hilgert I, Horejsi V: Characterization of the human leukocyte GPI-anchored glycoprotein CDw108 and its relation to other similar molecules. Immunobiology. 1999 Jun; 200(2):234-45. < PMID: 10416131 >
- 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. < PMID: 12137745 >
- 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. < PMID: 15618927 >
- 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. < PMID: 16673118 >
- 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. < PMID: 17335564 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

Cy and CyDye are trademarks of GE Healthcare.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com