

TECHNICAL DATA SHEET

CyFlow™ CD10 Purified Anti-Hu; Clone MEM-78

REF BT538992

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	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
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

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH $\approx$ 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 >
- 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 >

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

- 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.

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