TECHNICAL DATA SHEET

CyFlow™ CD71 Alexa Fluor™ 647
Anti-Hu; Clone MEM-75

REF **CX805345**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD71
Alternative Names	T9, TFR, TRFR
Clone	MEM-75
Clonality	monoclonal
Format	Alexa Fluor™ 647
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-75 recognizes CD71 antigen, a 95 kDa type II homodimeric transmembrane glycoprotein expressed on activated B and T lymphocytes, macrophages and erythroid

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

precursors; it is lost on resting blood leukocytes. The antibody MEM-75 does not block binding of transferrin to the receptor.

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 10^6 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

CD71 (transferrin receptor) is a type II transmembrane glycoprotein expressed as homodimer in erythroid blood cell line and in activated leukocytes. Upon binding of holotransferrin (complex of transferrin and iron ions), CD71 is internalized by clathrin-mediated endocytosis. Acidification of endosomes by vesicular membrane proton pumps leads to dissociation of iron ions, whereas transferrin (apotransferrin) remains associated with CD71 and recycles to the cell surface, where it is released upon exposure to normal pH. CD71 is also involved in uptake of non-transferrin bound iron.

References

- 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 >
- Takeichi M: Cadherin cell adhesion receptors as a morphogenetic regulator. Science. 1991 Mar 22; 251(5000):1451-5. < PMID: 2006419 >
- 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

- Grabbe S, Varga G, Beissert S, Steinert M, Pendl G, Seeliger S, Bloch W, Peters T, Schwarz T, Sunderkötter C, Scharffetter-Kochanek K: Beta2 integrins are required for skin homing of primed T cells but not for priming naive T cells. J Clin Invest. 2002 Jan; 109(2):183-92. < PMID: 11805130 >
- Rouas-Freiss N, Moreau P, Ferrone S, Carosella ED: HLA-G proteins in cancer: do they provide tumor cells with an escape mechanism?. Cancer Res. 2005 Nov 15; 65(22):10139-44. < PMID: 16287995 >
- Graham RM, Chua AC, Herbison CE, Olynyk JK, Trinder D: Liver iron transport. World J Gastroenterol. 2007 Sep 21; 13(35):4725-36. < PMID: 17729394 >
- Beck Z, Balogh A, Kis A, Izsépi E, Cervenak L, László G, Bíró A, Liliom K, Mocsár G, Vámosi G, Füst G, Matko J: New cholesterol-specific antibodies remodel HIV-1 target cells' surface and inhibit their in vitro virus production. J Lipid Res. 2010 Feb; 51(2):286-96. < PMID: 19654424 >

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