

TECHNICAL DATA SHEET

CyFlow™ CD63 FITC **Anti-Hu; Clone MEM-259**

REF CM498060

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

Specifications

Antigen	CD63
Alternative Names	LIMP, LAMP-3, MLA1
Clone	MEM-259
Clonality	monoclonal
Format	FITC
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	HPB-ALL T cell line

Specificity

The mouse monoclonal antibody MEM-259 recognizes CD63 antigen, a 40-60 kDa tetraspan glycoprotein expressed by granulocytes, platelets, T cells, monocytes/macrophages and endothelial cells. Cell surface exposition of CD63 is usually activation-dependent.

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 20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (2 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

CD63 (LAMP-3; lysosome-associated membrane protein-3), a glycoprotein of tetraspanin family, is present in late endosomes, lysosomes and secretory vesicles of various cell types. It is also present in the plasma membrane, usually following cell activation. Hence, it has become an widely used basophil activation marker. In mast cells, however, CD63 exposition does not need their activation. CD63 interacts with integrins and affects phagocytosis and cell migration, it is also involved in H/K-ATPase trafficking regulation of ROMK1 channels. CD63 also serves as a T-cell costimulation molecule. Expression of CD63 can be used for predicting the prognosis in earlier stages of carcinomas.

References

- Mantegazza AR, Barrio MM, Moutel S, Bover L, Weck M, Brossart P, Teillaud JL, Mordoh J: CD63 tetraspanin slows down cell migration and translocates to the endosomal-lysosomal-MIICs route after extracellular stimuli in human immature dendritic cells. Blood. 2004 Aug 15; 104(4):1183-90. < PMID: 15130945 >
- Cerny J, Feng Y, Yu A, Miyake K, Borgonovo B, Klumperman J, Meldolesi J, McNeil PL, Kirchhausen T: The small chemical vacuolin-1 inhibits Ca(2+)-dependent lysosomal exocytosis but not cell resealing. EMBO Rep. 2004 Sep; 5(9):883-8. < PMID: 15332114 >

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

- Grützkau A, Smorodchenko A, Lippert U, Kirchhof L, Artuc M, Henz BM: LAMP-1 and LAMP-2, but not LAMP-3, are reliable markers for activation-induced secretion of human mast cells. Cytometry A. 2004 Sep; 61(1):62-8. < PMID: 15351990 >
- Pfistershammer K, Majdic O, Stöckl J, Zlabinger G, Kirchberger S, Steinberger P, Knapp W: CD63 as an activation-linked T cell costimulatory element. J Immunol. 2004 Nov 15; 173(10):6000-8. < PMID: 15528334 >
- Israels SJ, McMillan-Ward EM: CD63 modulates spreading and tyrosine phosphorylation of platelets on immobilized fibrinogen. Thromb Haemost. 2005 Feb; 93(2):311-8. < PMID: 15711748 >
- Kwon MS, Shin SH, Yim SH, Lee KY, Kang HM, Kim TM, Chung YJ: CD63 as a biomarker for predicting the clinical outcomes in adenocarcinoma of lung. Lung Cancer. 2007 Jul; 57(1):46-53. < PMID: 17350713 >
- Lin D, Kamsteeg EJ, Zhang Y, Jin Y, Sterling H, Yue P, Roos M, Duffield A, Spencer J, Caplan M, Wang WH: Expression of tetraspan protein CD63 activates protein tyrosine kinase (PTK) and enhances the PTK-induced inhibition of ROMK channels. J Biol Chem. 2008 Jan 22; < PMID: 19880522 >

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