



PC-343-T025

Monoclonal Antibody to CD63 PerCP (25 tests)

Clone:	MEM-259
Isotype:	Mouse IgG1
Specificity:	The antibody MEM-259 reacts with CD63 (LAMP-3), 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.
Immunogen:	HPB-ALL T cell line
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with Peridinin-chlorophyll-protein complex (PerCP) 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 phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
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. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.25 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	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 a 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.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

- *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.
- *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.
- *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.
- *Israels SJ, McMillan-Ward EM: CD63 modulates spreading and tyrosine phosphorylation of platelets on immobilized fibrinogen. *Thromb Haemost*. 2005 Feb;93(2):311-8.
- *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.
- *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
- *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. Erratum in: *EMBO Rep*. 2005 Sep;6(9):898.

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