# CD63 monoclonal antibody, clone MEM-259 (PE)

Catalog # MAB4458 Size 100 Reactions

#### Specification

Product Description	Mouse monoclonal antibody raised against native CD63.
Immunogen	Native purified CD63 from human T cell line HPB-ALL.
Host	Mouse
Theoretical MW (kDa)	40-60
Reactivity	Human
Specificity	This antibody reacts with CD63 (LAMP-3), a 40-60 KDa tetraspan glycoprotein expressed by granul ocytes, platelets, T cells, monocytes/macrophages and endothelial cells. Cell surface exposition of C D63 is usually activation-dependent.
Form	Liquid
Conjugation	PE
lsotype	lgG1
Recommend Usage	Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10 <sup>6</sup> cells in a suspension) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

## Applications

Western Blot

- Immunocytochemistry
- Immunoprecipitation
- Flow Cytometry

#### Gene Info — CD63

Entrez GenelD	<u>967</u>
Gene Name	CD63
Gene Alias	LAMP-3, ME491, MLA1, OMA81H, TSPAN30
Gene Description	CD63 molecule
Omim ID	<u>155740</u>
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the transmembrane 4 superfamily, also known a s the tetraspanin family. Most of these members are cell-surface proteins that are characterized b y the presence of four hydrophobic domains. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. This encoded prot ein is a cell surface glycoprotein that is known to complex with integrins. It may function as a blood platelet activation marker. Deficiency of this protein is associated with Hermansky-Pudlak syndro me. Also this gene has been associated with tumor progression. The use of alternate polyadenyla tion sites has been found for this gene. Alternative splicing results in multiple transcript variants en coding different proteins. [provided by RefSeq
Other Designations	CD63 antigen CD63 antigen (melanoma 1 antigen) granulophysin lysosome-associated membra ne glycoprotein 3 melanoma 1 antigen melanoma-associated antigen ME491 melanoma-associat ed antigen MLA1 ocular melanoma-associated antigen tetraspanin-30

### Publication Reference

• Expression of tetraspan protein CD63 activates protein-tyrosine kinase (PTK) and enhances the PTK-induced inhibition of ROMK channels.

Lin D, Kamsteeg EJ, Zhang Y, Jin Y, Sterling H, Yue P, Roos M, Duffield A, Spencer J, Caplan M, Wang WH.

The Journal of Biological Chemistry 2008 Jan; 283(12):7674.



• CD63 as a biomarker for predicting the clinical outcomes in adenocarcinoma of lung.

Kwon MS, Shin SH, Yim SH, Lee KY, Kang HM, Kim TM, Chung YJ. Lung Cancer 2007 Mar; 57(1):46.

• The small chemical vacuolin-1 inhibits Ca(2+)-dependent lysosomal exocytosis but not cell resealing.

Cerny J, Feng Y, Yu A, Miyake K, Borgonovo B, Klumperman J, Meldolesi J, McNeil PL, Kirchhausen T. EMBO Reports 2004 Sep; 5(9):883.

#### Pathway

• Lysosome