

Mouse Anti-Human CD63 Monoclonal Antibody

Mouse, Monoclonal (CD63) Cat. No. DMAB2431MH Lot. No. (See product label)

PRODUCT INFORMATION

Antigen Description: The protein encoded by this gene is a member of the transmembrane 4 superfamily, also known as the tetraspanin family. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. This encoded protein 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 syndrome. Also this gene has been associated with tumor progression. The use of alternate polyade-nylation sites has been found for this gene. Alternative splicing results in multiple transcript variants encoding different proteins.

Immunogen: Human cytochrome B enriched cells *Isotype:* IgG₁

Specificity: The molecular weight of the recognized platelet form of CD63 is 40 to 55kDa. CLBGran/12 reacts with most peripheral blood cells including activated platelets, lymphoid, myeloid and endothelial cells, except for red blood cells and resting T cells. The CD63 antigen is present in many tissues and cell line PHA blasts, K562, U937, KG1a, RAJI. Both surface and cytoplasmotic reactions are reported. CLB Gran/12 has been assigned to the CD63 cluster of differentiation at the IVth International Workshop on Human Leucocyte Differentiation Antigens.

Clone: DLBGran/13

Host animal: Mouse. Hybridization of Sp2/0 Ag 1.4 myeloma cells with spleen cells from BALB/c x AJ mice.

Format: FITC, Liquid

Application: Detection of activated platelets, neutrophils and basophils. <u>Fluorescence microscopy or flow cytometry</u>: 20µl/10⁶ platelets/test or 20µl/5 x 10⁵ cells/test Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded. Centrifuge before opening to ensure complete recovery of vial contents.

PACKAGING

Buffer: 0.01M Sodium phosphate, 0.145M Sodium chloride, pH 7.2 containing 2mg/ml BSA

Preservative: 0.1% Sodium azide

Storage: Store at 2-8°C. DO NOT FREEZE

Warning: This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1 - 1.0 %. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

ANTIGEN GENE INFORMATION

Gene Name: CD63 CD63 molecule [Homo sapiens] Official Symbol: CD63

Synonyms: MLA1; ME491; LAMP-3; OMA81H; TSPAN30; CD63; CD63 antigen; tspan-30; granulophysin; tetraspanin-30; melanoma 1 antigen; melanoma-associated antigen MLA1; CD63 antigen (melanoma 1 antigen); melanoma-associated antigen ME491; ocular melanoma-associated antigen; lysosomal-associated membrane protein 3; lysosome-associated membrane glycoprotein 3 *GenelD:* <u>967</u>

mRNA Refseq: <u>NM_001040034</u> Protein Refseq: <u>NP_001035123</u> MIM: <u>155740</u>

UniProt ID: P08962

Chromosome Location: 12q12-q13

Pathway: Formation of Platelet plug, organism-specific biosystem; Hemostasis, organism-specific biosystem; Lysosome, organism-specific biosystem; Lysosome, conserved bio- system; Platelet Activation, organism-specific biosystem; Platelet degranulation, organism-specific biosystem; Response to elevated platelet cytosolic Ca²⁺, organismspecific biosystem

Function: protein complex binding

REFERENCES

1. Azorsa, D.O., et al., (1995), "CD63 cluster report workshop", In Leucocyte Typing V, Schlossman, S.F. et al, Eds. Oxford University Press, pp 1352-1353.

2. Mul, F. P.J., et al., "An improved method for the purification of basophilic granulocytes from human blood", Journal of Immunological Methods, 149, 207-214.

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