

CD63 Monoclonal Mouse Antibody (H5C6)

CD63 (clone H5C6) is a validated mouse monoclonal antibody that recognizes the human tetraspanin protein CD63.



Product Description

CD63 (clone H5C6) is a mouse monoclonal antibody that recognizes the human tetraspanin protein CD63. This antibody has been validated in flow cytometry, in immunofluorescence microscopy, and in western blot. It is supplied conjugated to R-Phycoerythrin (R-PE or PE) at 0.1 mg/mL with 0.1% BSA, or purified at 0.5 mg/mL, BSA-free. The tetraspanins are integral membrane proteins expressed on cell surface and granular membranes of hematopoietic cells and are components of multi-molecular complexes with specific integrins. The tetraspanin CD63 is a lysosomal membrane glycoprotein that translocates to the plasma membrane after platelet activation. CD63 is expressed on activated platelets, monocytes and macrophages, and is weakly expressed on granulocytes, T cell and B cells. It is located on the basophilic granule membranes and on the plasma membranes of lymphocytes and granulocytes. CD63 is a member of the TM4 superfamily of leukocyte glycoproteins that includes CD9, CD37 and CD53, which contain four transmembrane regions. CD63 may play a role in phagocytic and intracellular lysosome-phagosome fusion events. CD63 deficiency is associated with Hermansky-Pudlak syndrome and is strongly expressed during the early stages of melanoma progression. Tetraspanin proteins CD9, CD63, and CD81, are the most common proteins used as exosome markers. Tetraspanins are plasma membrane proteins with many proposed functions, including activation and sorting of other membrane proteins. They are also thought to play a role in the targeting of proteins to multivesicular bodies (MVBs) and exosomes. These tetraspanins are broadly expressed on many cell types and can therefore be detected on many types of exosomes, but their expression levels vary depending on the cell type of origin. **Exosome Stains and Antibodies** Biotium also offers [ExoBrite™ CD63 Flow Antibody](#) and [ExoBrite™ CD63 Western Antibody](#) that are validated for optimal detection of isolated exosomes by flow cytometry or western blotting. [Learn more about our products for exosome research.](#)

Product attributes

Antibody number	#P004
SwissProt	P08962
Antibody type	Primary
Clonality	Monoclonal
Host species	Mouse
Clone	H5C6
Isotype	IgG1, kappa
Antibody reactivity (target)	CD63
Synonyms	gp55; granulophysin; Lysosomal-associated membrane protein 3 (LAMP-3); Mast cell antigen AD1; melanoma 1 antigen; Melanoma-associated antigen MLA1; Melanoma-associated antigen ME491; MLA1; NGA; Ocular melanoma-associated antigen; OMA81H; PTLGP40; Tetraspanin-30; TSPAN30
Species reactivity	Baboon, Cynomolgus monkey, Human, Non-human primates
Human gene symbol	CD63
Entrez gene ID	967
UniGene	445570
Molecular weight	26 kDa (core protein); 30-60 kDa (glycosylated)
Antibody target cellular localization	Exosomes/EVs, Lysosomes, Plasma membrane, Membrane/vesicular, Multivesicular bodies
Cell/tissue expression	Exosomes, Platelets, Granulocytes, Lymphocytes, Monocytes/macrophages
Verified antibody applications	Flow (surface) (verified), IF (verified), WB (verified)
Positive control	U87MG, SK-MEL-28, HL60, THP-1, NIH/3T3, or MCF-7 cells. Human melanoma, spleen or lymphoma tissue.
Antibody application notes	Flow Cytometry: 0.5-1 ug/mL (or, 0.05-0.1 ug/million cells), Immunofluorescence: 1 ug/mL, Western Blot: 0.1 ug/mL
Antibody research areas	Exosomes/EVs
Antibody/conjugate formulation	Purified: 0.5 mg/mL in PBS/0.05% azide, Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Storage Conditions	Store at 2 to 8 °C
Regulatory status	For research use only (RUO)

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