

CD63 (Mouse) Recombinant Monoclonal Rat Antibody (24MS05.63) - Biotium Choice



CD63 (clone 24MS05.63) is a validated recombinant rat monoclonal antibody that recognizes the mouse tetraspanin protein CD63. The antibody belongs to the Biotium Choice list of select antibodies that have been formulated and validated in-house for optimal performance.

Product Description

CD63 (clone 24MS05.63) is a recombinant rat monoclonal antibody that recognizes the mouse tetraspanin protein CD63. This antibody belongs to the Biotium Choice list of select antibodies that have been formulated and validated in-house for optimal performance. This antibody has been validated in flow cytometry.

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.

Biotium also offers Biotium choice recombinant antibodies against [mouse CD9 \(24MS04.9\)](#) and [mouse/rat CD81 \(24MS04.81\)](#).

[View our full catalog of Biotium Choice antibodies](#), optimized and validated for the best results in flow cytometry.

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	#P020
SwissProt	P41731
Biotium Choice Antibody	Primary
Antibody type	Biotium Choice Flow Antibodies, Primary
Clonality	Recombinant Monoclonal
Host species	Rat
Clone	24MS05.63
Isotype	IgG2a, kappa
Antibody reactivity (target)	CD63
Synonyms	LIMP, LAMP-3, gp55, melanoma-associated antigen, ME491
Species reactivity	Mouse
Human gene symbol	CD63
Entrez gene ID	12512
Molecular weight	53 kDa
Antibody target cellular localization	Exosomes/EVs, Plasma membrane
Cell/tissue expression	Exosomes, Hepatocytes, Lymphocytes, Monocytes/macrophages
Verified antibody applications	Flow (surface) (verified)
Positive control	GARCF568 cell, NIH 3T3 cells
Antibody application notes	Recommended concentration for flow cytometry: 5 uL per million cells/0.1 mL
Antibody research areas	Exosomes/EVs
Antibody/conjugate formulation	Conjugates: PBS/0.1% BSA/0.05% azide, Purified, BSA-free: 5 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Storage Conditions	Store at -35 °C to -5 °C, Store at 2 to 8 °C
Regulatory status	For research use only (RUO)

Conjugation	Ex/Em	Conc.	Size	Catalog No.	Dye Features
CF@405M	416/452 nm	100 ug/mL	25 tests (125 uL)	P020-405M-125	CF@405M Features
			100 tests (500 uL)	P020-405M-500	
CF@488A	490/516 nm	100 ug/mL	25 tests (125 uL)	P020-488A-125	CF@488A Features
			100 tests (500 uL)	P020-488A-500	
CF@ 568	562/584 nm	100 ug/mL	25 tests (125 uL)	P020-568-125	CF@568 Features
			100 tests (500 uL)	P020-568-500	
CF@ 647Plus	652/668 nm	100 ug/mL	25 tests (125 uL)	P020-647P-125	CF@647Plus Features
			100 tests (500 uL)	P020-647P-500	
Purified (BSA-free)	N/A	5 mg/mL	1 mg	P020-1MG	
			5 mg	P020-5MG	