CD81 (Mouse/Rat) Recombinant Monoclonal Hamster Antibody (24MS04.81) – Biotium Choice



CD81 (24MS04.81) is a validated recombinant hamster monoclonal antibody that recognizes the tetraspanin protein CD81 from mouse and rat. The antibody belongs to the Biotium Choice list of select antibodies that have been formulated and validated in-house for optimal performance.

Product Description

CD81 (24MS04.81) is a recombinant hamster monoclonal antibody that recognizes the tetraspanin protein CD81 from mouse and rat. 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 and immunofluorescence microscopy. The antibody is available purified and BSA-free.

CD81 is a 26 kD non-glycosylated member of the tetraspanin superfamily (TM4SF), also known as TAPA-1. CD81 is expressed on T and B cells, NK cells, dendritic cells, thymocytes, endothelial cells, and fibroblasts. CD81 induces B cell adhesion via the VLA-4 integrin and has been shown to play a role in early T cell development. CD81 associates with several other cell-surface proteins in a multimolecular complex, including CD19, CD21, CD20, CD37, CD53, and CD82 in B cells, and CD4, CD8 and CD82 in T cells.

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.

As an isotype control, we recommend Armenian Hamster IgG Monoclonal Isotype Control Antibody (HTK888) for this antibody.

Biotium also offers Biotium choice recombinant antibodies against mouse CD9 (24MS04.9) and human CD81 (2304.81).

Exosome Stains and Antibodies

Biotium also offers ExoBrite™ CD81 Flow Antibody and ExoBrite™ CD81 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.

Discover Sharper Signals and Unmatched Panel Flexibility with Biotium Choice Antibodies
Powered by CF® Dyes and Astral Leap™ Tandem Dyes

Biotium Choice antibodies are carefully curated and validated in-house to offer exceptional signal-to-noise. Labeled with our advanced CF® Dyes and Astral Leap™ tandem dyes, they are our top-recommended antibodies for flow cytometry and other applications.

Biotium Choice Antibody Features

- Robust and validated clones against common targets
- Developed and optimized for flow cytometry and other applications
- Conjugated to bright, photostable CF® Dyes for superior signal and clarity
- Also available with Astral Leap™ tandem dyes for expanding multiplexing
- New antibody clones and dye conjugates continuously in development

View our full catalog of Biotium Choice antibodies

Product attributes

Antibody number	#P017
SwissProt	P35762
Biotium Choice Antibody	Primary
Antibody type	Biotium Choice, Primary
Clonality	Monoclonal, Recombinant Monoclonal
Host species	Armenian Hamster
Clone	24MS04.81
Isotype	IgG1, kappa
Antibody reactivity (target)	CD81
Synonyms	Target of the antiproliferative antibody 1 (TAPA-1)
Species reactivity	Mouse, Rat
Human gene symbol	CD81
Entrez gene ID	12520 (mouse), 25621 (rat)
Unigene	P35762 (mouse), Q62745 (rat)
Molecular weight of antigen	26 kDa
Antibody target cellular localization	Exosomes/EVs, Plasma membrane
Cell/tissue expression	Exosomes, Hepatocytes, Lymphocytes, Monocytes/macrophages
Verified antibody applications	Flow (surface) (verified), IF (verified), WB (verified)
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Positive control	NIH 3T3 cells, RAW 264.7 cells
Antibody application notes	Immunofluorescence: 1 ug/mL, Western Blot: 0.05 ug/mL, Flow cytometry: 0.5-1 ug/million cells
Antibody research areas	Exosomes/EVs
Antibody/conjugate formulation	Purified, BSA-free: 5 mg/mL in PBS/0.05% azide, Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide
Volume per assay	5 uL/test
Storage Conditions	Store at 2 to 8 °C
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
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)	P017-405M-125	CF®405M Features
100 tests (500 uL)	P017-405M-500				
CF®488A	490/516 nm	100 ug/mL	25 tests (125 uL)	P017-488A-125	CF®488A Features
100 tests (500 uL)	P017-488A-500				
CF® 568	562/584 nm	100 ug/mL	25 tests (125 uL)	P017-568-125	CF®568 Features
100 tests (500 uL)	P017-568-500				
CF® 647Plus	652/668 nm	100 ug/mL	25 tests (125 uL)	P017-647P-125	CF®647Plus Features
100 tests (500 uL)	P017-647P-500				
Purified (BSA-free)	N/A	5 mg/mL	1 mg (200 uL)	P017-1MG	
5 mg (1 mL)	P017-5MG				

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Product link: https://biotium.com/product/cd81-recombinant-monoclonal-mouse-rat-antibody-24ms04-81-biotium-choice/