

# 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.

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

[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™ 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.](#)

## Product attributes

Antibody number	#P017
SwissProt	P35762
Biotium Choice Antibody	Primary
Antibody type	Biotium Choice Flow Antibodies, Primary
Clonality	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	26 kDa
Antibody target cellular localization	Exosomes/EVs, Plasma membrane
Cell/tissue expression	Exosomes, Hepatocytes, Lymphocytes, Monocytes/macrophages
Verified antibody applications	Flow (surface) (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 without azide, Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide
Volume per assay	5 uL/test
Storage Conditions	Note: store unconjugated formats at -10 °C to -35 °C, Store at 2 to 8 °C
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum ( <i>Bos taurus</i> ), 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
<a href="#">CF@405M</a>	416/452 nm	100 ug/mL	25 tests (125 uL)	<a href="#">P017-405M-125</a>	<a href="#">CF@405M Features</a>
			100 tests (500 uL)	<a href="#">P017-405M-500</a>	
<a href="#">CF@488A</a>	490/516 nm	100 ug/mL	25 tests (125 uL)	<a href="#">P017-488A-125</a>	<a href="#">CF@488A Features</a>
			100 tests (500 uL)	<a href="#">P017-488A-500</a>	
<a href="#">CF@ 568</a>	562/584 nm	100 ug/mL	25 tests (125 uL)	<a href="#">P017-568-125</a>	<a href="#">CF@568 Features</a>
			100 tests (500 uL)	<a href="#">P017-568-500</a>	
<a href="#">CF@ 647Plus</a>	652/668 nm	100 ug/mL	25 tests (125 uL)	<a href="#">P017-647P-125</a>	<a href="#">CF@647Plus Features</a>
			100 tests (500 uL)	<a href="#">P017-647P-500</a>	
<a href="#">Purified (BSA-free)</a>	N/A	5 mg/mL	1 mg	<a href="#">P017-1MG</a>	
			5 mg	<a href="#">P017-5MG</a>	

This datasheet was generated on January 30, 2025 at 09:37:47 AM. Visit product page to check for updated information before use. Product link: <http://54.245.69.9/product/cd81-recombinant-monoclonal-mouse-rat-antibody-24ms04-81-biotium-choice/>