

ExoBrite™ CD81 (Mouse/Rat) Flow Antibody



Validated antibody for optimal detection of EV marker CD81 from mouse or rat in purified or bead-bound EVs by flow cytometry.

Product Description

ExoBrite™ CD81 (Mouse/Rat) Flow Antibody has been validated by Biotium for detection of EV marker CD81 from mouse or rat in isolated EVs. The antibody conjugates offer exceptional signal-to-noise and include color options for the Pacific Blue™, FITC, PE, and APC channels.

- **NEW: Now with updated buffer formulation for improved signal-to-noise**
- Optimal detection of mouse or rat CD81 EV marker by flow cytometry
- Validated for purified or bead-bound EVs
- Bright signal and low background
- Available in 5 colors

The most common proteins used as EV markers are CD9, CD63, and CD81, members of the tetraspanin family. These tetraspanins are broadly expressed on many cell types and can therefore be detected on many types of EVs, but their expression levels vary depending on the cell type of origin.

EV antibodies you can trust

Other commercially available antibodies for tetraspanin proteins CD9, CD63, and CD81 are generally not validated for isolated EVs and may require tedious optimization for your EV prep and staining protocol. The antibodies and dye labels of ExoBrite™ Flow Antibody Conjugates were carefully selected and validated for robust detection of isolated EVs. In addition, the antibodies are provided in a proprietary buffer formulation for reduced antibody aggregation and brighter EV staining for optimal accuracy and signal-to-noise.

For general EV staining, Biotium's [ExoBrite™ True EV Membrane Stains](#) offer unparalleled coverage of EVs in a sample and address issues of dye aggregation often seen with PKH and other common membrane dyes. Biotium also offers optimized ExoBrite™ EV Surface stains conjugated to [cholera toxin B \(CTB\)](#), [wheat germ agglutinin \(WGA\)](#), and [Annexin V](#). These stains are specially formulated for bright and specific detection of isolated EVs by flow cytometry. These ExoBrite™ EV Surface stains may also be combined with antibody staining, for multi-parameter analysis.

Biotium also offers conjugated ExoBrite™ Western Antibodies against [CD9](#), [CD63](#), and [CD81](#) designed for optimal detection in EV extracts by fluorescent western blot.

Note: In our testing, we have found that ExoBrite™ 490/515 dye may bind to streptavidin coated surfaces or beads if free biotin binding sites are not blocked. We recommend performing a biotin blocking step after binding your biotinylated capture antibody to streptavidin beads or surfaces when using ExoBrite™ 490/515 conjugates. Alternatively, consider using a different ExoBrite™ dye for staining EVs captured on streptavidin beads or surfaces.

ExoBrite™ Flow Antibody Conjugates

Antibody	Ex/Em	Target	Species Reactivity	Detection Channel	Catalog No.
ExoBrite™ 410/450 CD9 Flow Antibody	416/452 nm	CD9	Human	Pacific Blue™	P003-410
ExoBrite™ 490/515 CD9 Flow Antibody	490/516 nm	CD9	Human	FITC	P003-490
ExoBrite™ 560/585 CD9 Flow Antibody	562/584 nm	CD9	Human	PE	P003-560
ExoBrite™ 640/660 CD9 Flow Antibody	642/663 nm	CD9	Human	APC	P003-640
ExoBrite™ R-PE CD9 Flow Antibody	496, 546, 565/578 nm	CD9	Human	PE	P003-RPE
ExoBrite™ APC CD9 Flow Antibody	651/660 nm	CD9	Human	APC	P003-APC
ExoBrite™ 410/450 CD9 (Mouse) Flow Antibody	416/452 nm	CD9	Mouse	Pacific Blue™	P018-410
ExoBrite™ 490/515 CD9 (Mouse) Flow Antibody	490/516 nm	CD9	Mouse	FITC	P018-490
ExoBrite™ 560/585 CD9 (Mouse) Flow Antibody	562/584 nm	CD9	Mouse	PE	P018-560
ExoBrite™ 640/660 CD9 (Mouse) Flow Antibody	642/663 nm	CD9	Mouse	APC	P018-640

Product attributes

Antibody number	#P019
SwissProt	P35762 (mouse), Q62745 (rat)
Antibody type	Primary
Clonality	Monoclonal
Host species	Hamster (Cricetinae)
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)
Molecular weight	26 kDa
Antibody target cellular localization	Exosomes/EVs, Plasma membrane
Cell/tissue expression	Exosomes, Hepatocytes, Lymphocytes, Monocytes/macrophages
Verified antibody applications	Exosome staining (verified)
Shipping condition	Room temperature
Positive control	NIH 3T3 cells
Antibody application notes	Recommended concentration for flow cytometry: 5 uL per 0.1 mL exosomes
Antibody research areas	Exosomes/EVs
Antibody/conjugate formulation	Proprietary buffer containing 0.05% sodium 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, Protect fluorescent conjugates from light
Regulatory status	For research use only (RUO)
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.

Antibody	Ex/Em	Target	Species Reactivity	Detection Channel	Catalog No.
ExoBrite™ APC CD9 (Mouse) Flow Antibody	651/660 nm	CD9	Mouse	APC	P018-APC
ExoBrite™ 410/450 CD63 Flow Antibody	416/452 nm	CD63	Human	Pacific Blue™	P004-410
ExoBrite™ 490/515 CD63 Flow Antibody	490/516 nm	CD63	Human	FITC	P004-490
ExoBrite™ 560/585 CD63 Flow Antibody	562/584 nm	CD63	Human	PE	P004-560
ExoBrite™ 640/660 CD63 Flow Antibody	642/663 nm	CD63	Human	APC	P004-640
ExoBrite™ R-PE CD63 Flow Antibody	496, 546, 565/578	CD63	Human	PE	P004-RPE
ExoBrite™ APC CD63 Flow Antibody	651/660 nm	CD63	Human	APC	P004-APC
ExoBrite™ 410/450 CD63 (Mouse) Flow Antibody	416/452 nm	CD63	Mouse	Pacific Blue™	P022-410
ExoBrite™ 490/515 CD63 (Mouse) Flow Antibody	490/516 nm	CD63	Mouse	FITC	P022-490
ExoBrite™ 560/585 CD63 (Mouse) Flow Antibody	562/584 nm	CD63	Mouse	PE	P022-560
ExoBrite™ 640/660 CD63 (Mouse) Flow Antibody	642/663 nm	CD63	Mouse	APC	P022-640
ExoBrite™ APC CD63 (Mouse) Flow Antibody	651/660 nm	CD63	Mouse	APC	P022-APC
ExoBrite™ 410/450 CD81 Flow Antibody	416/452 nm	CD81	Human	Pacific Blue™	P005-410
ExoBrite™ 490/515 CD81 Flow Antibody	490/516 nm	CD81	Human	FITC	P005-490
ExoBrite™ 560/585 CD81 Flow Antibody	562/584 nm	CD81	Human	PE	P005-560
ExoBrite™ 640/660 CD81 Flow Antibody	642/663 nm	CD81	Human	APC	P005-640
ExoBrite™ R-PE CD81 Flow Antibody	496, 546, 565/578	CD81	Human	PE	P005-RPE
ExoBrite™ APC CD81 Flow Antibody	651/660 nm	CD81	Human	APC	P005-APC
ExoBrite™ 410/450 CD81 (Mouse/Rat) Flow Antibody	416/452 nm	CD81	Mouse, Rat	Pacific Blue™	P019-410
ExoBrite™ 490/515 CD81 (Mouse/Rat) Flow Antibody	490/516 nm	CD81	Mouse, Rat	FITC	P019-490
ExoBrite™ 560/585 CD81 (Mouse/Rat) Flow Antibody	562/584 nm	CD81	Mouse, Rat	PE	P019-560
ExoBrite™ 640/660 CD81 (Mouse/Rat) Flow Antibody	642/663 nm	CD81	Mouse, Rat	APC	P019-640
ExoBrite™ APC CD81 (Mouse) Flow Antibody	651/660 nm	CD81	Mouse, Rat	APC	P019-APC
ExoBrite™ 410/450 IgG1 Isotype Control Flow Antibody	416/452 nm	Isotype Control	None	Pacific Blue™	P008-410
ExoBrite™ 490/515 IgG1 Isotype Control Flow Antibody	490/516 nm	Isotype Control	None	FITC	P008-490
ExoBrite™ 560/585 IgG1 Isotype Control Flow Antibody	562/584 nm	Isotype Control	None	PE	P008-560
ExoBrite™ R-PE IgG1 Isotype Control Flow Antibody	496, 546, 565/578	Isotype Control	None	PE	P008-RPE
ExoBrite™ 640/660 IgG1 Isotype Control Flow Antibody	642/663 nm	Isotype Control	None	APC	P008-640