

ExoBrite™ STORM CD81 Antibody

Validated CD81 antibody for detection of EVs, formulated to minimize aggregation, and conjugated to high-performance CF® Dyes for STORM.



Product Description

ExoBrite™ STORM CD81 Antibody is designed for detecting the EV marker CD81 using stochastic optical reconstruction microscopy (STORM). Conjugated to optimized CF® Dyes for superior STORM performance, the antibody and its buffer are also specifically formulated for reliable detection of isolated EVs.

- Validated antibody for detecting EV marker CD81
- Available with excellent STORM dyes CF®498, CF®568, CF®583R, and CF®647Plus
- Proprietary buffer for enhanced signal-to-noise
- Available in 4 colors for FITC, Cy@3, Texas Red®, and Cy@5 channels

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.

Superior performance for STORM imaging

Other commercially available antibodies for tetraspanin proteins CD9, CD63, and CD81 are generally not validated for isolated EVs or super-resolution imaging, and may require tedious optimization for your EV prep and staining protocol.

ExoBrite™ STORM Antibodies are powered by our [industry-leading CF® Dyes for STORM](#). Available in CF®498, CF®568, CF®583R, and CF®647Plus, these dyes offer exceptional photochemical switching properties—delivering superior signal quality and image reconstruction for unmatched performance in STORM.

The labeled antibody was 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. ExoBrite™ STORM Antibodies are compatible with co-staining with other fluorescently labeled antibodies or for bead-bound EV staining protocols.

[Cholera toxin subunit B \(CTB\)](#) conjugated to high-performance CF® Dyes for STORM are also available, as well as tetraspanin antibodies optimized for detection of EVs by [flow cytometry](#) and [western blotting](#).

Learn more about our [CF® Dyes for super-resolution imaging](#), as well as our other [ExoBrite™ stains, antibodies, and other reagents](#) developed specifically for EV detection and analysis.

Product attributes

Antibody number	#P005
SwissProt	P60033
Antibody type	ExoBrite™, Primary
Clonality	Monoclonal
Host species	Mouse
Isotype	IgG1, kappa
Antibody reactivity (target)	CD81
Synonyms	CD81; Target of the antiproliferative antibody 1 (TAPA-1); Tetraspanin-28; Tspan-28
Species reactivity	Baboon, Cynomolgus monkey, Human, Mouse (low reactivity), Non-human primates
Human gene symbol	CD81
Entrez gene ID	975
Unigene	54457
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), Exosome staining (verified)
Positive control	MCF-7 cells, MCF-7 derived exosomes
Shipping condition	Room temperature
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 (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

ExoBrite™ STORM Antibody Conjugates

Antibody	Ex/Em	Size	Conc.	Detection Channel	Catalog No.
ExoBrite™ STORM CF@498 CD9 Antibody	498/519 nm	500 uL	100 ug/mL	FITC	P003-498ST-500
ExoBrite™ STORM CF@568 CD9 Antibody	562/584 nm	500 uL	100 ug/mL	Cy@3	P003-568ST-500
ExoBrite™ STORM CF@583R CD9 Antibody	585/609 nm	500 uL	100 ug/mL	Texas Red®	P003-583RST-500
ExoBrite™ STORM CF@647Plus CD9 Antibody	652/668 nm	500 uL	100 ug/mL	Cy@5	P003-647PST-500
ExoBrite™ STORM CF@498 CD63 Antibody	498/519 nm	500 uL	100 ug/mL	FITC	P004-498ST-500
ExoBrite™ STORM CF@568 CD63 Antibody	562/584 nm	500 uL	100 ug/mL	Cy@3	P004-568ST-500
ExoBrite™ STORM CF@583R CD63 Antibody	585/609 nm	500 uL	100 ug/mL	Texas Red®	P004-583RST-500
ExoBrite™ STORM CF@647Plus CD63 Antibody	652/668 nm	500 uL	100 ug/mL	Cy@5	P004-647PST-500
ExoBrite™ STORM CF@498 CD81 Antibody	498/519 nm	500 uL	100 ug/mL	FITC	P005-498ST-500
ExoBrite™ STORM CF@568 CD81 Antibody	562/584 nm	500 uL	100 ug/mL	Cy@3	P005-568ST-500
ExoBrite™ STORM CF@583R CD81 Antibody	585/609 nm	500 uL	100 ug/mL	Texas Red®	P005-583RST-500
ExoBrite™ STORM CF@647Plus CD81 Antibody	652/668 nm	500 uL	100 ug/mL	Cy@5	P005-647PST-500
ExoBrite™ STORM CF@568 CD9 (Mouse) Antibody	562/584 nm	500 uL	100 ug/mL	Cy@3	P018-568ST-500
ExoBrite™ STORM CF@647Plus CD9 (Mouse) Antibody	652/668 nm	500 uL	100 ug/mL	Cy@5	P018-647PST-500
ExoBrite™ STORM CF@568 CD63 (Mouse) Antibody	562/584 nm	500 uL	100 ug/mL	Cy@3	P022-568ST-500
ExoBrite™ STORM CF@647Plus CD63 (Mouse) Antibody	652/668 nm	500 uL	100 ug/mL	Cy@5	P022-647PST-500
ExoBrite™ STORM CF@568 CD81 (Mouse/Rat) Antibody	562/584 nm	500 uL	100 ug/mL	Cy@3	P019-568ST-500
ExoBrite™ STORM CF@647Plus CD81 (Mouse/Rat) Antibody	652/668 nm	500 uL	100 ug/mL	Cy@5	P019-647PST-500

CY DYE is a registered trademark of Cytiva; Texas Red is registered trademark of Thermo Fisher Scientific.

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