

Product Information

ExoBrite™ STORM Antibody Conjugates

Product List

Product	Cat. No.	Unit Size
ExoBrite™ STORM CF@498 CD9 Antibody	P003-498ST-500	500 uL
ExoBrite™ STORM CF@568 CD9 Antibody	P003-568ST-500	500 uL
ExoBrite™ STORM CF@583R CD9 Antibody	P003-583RST-500	500 uL
ExoBrite™ STORM CF@647Plus CD9 Antibody	P003-647PST-500	500 uL
ExoBrite™ STORM CF@498 CD63 Antibody	P004-498ST-500	500 uL
ExoBrite™ STORM CF@568 CD63 Antibody	P004-568ST-500	500 uL
ExoBrite™ STORM CF@583R CD63 Antibody	P004-583RST-500	500 uL
ExoBrite™ STORM CF@647Plus CD63 Antibody	P004-647PST-500	500 uL
ExoBrite™ STORM CF@498 CD81 Antibody	P005-498ST-500	500 uL
ExoBrite™ STORM CF@568 CD81 Antibody	P005-568ST-500	500 uL
ExoBrite™ STORM CF@583R CD81 Antibody	P005-583RST-500	500 uL
ExoBrite™ STORM CF@647Plus CD81 Antibody	P005-647PST-500	500 uL
ExoBrite™ STORM CF@568 CD9 (Mouse) Antibody	P018-568ST-500	500 uL
ExoBrite™ STORM CF@647Plus CD9 (Mouse) Antibody	P018-647PST-500	500 uL
ExoBrite™ STORM CF@568 CD63 (Mouse) Antibody	P022-568ST-500	500 uL
ExoBrite™ STORM CF@647Plus CD63 (Mouse) Antibody	P022-647PST-500	500 uL
ExoBrite™ STORM CF@568 CD81 (Mouse/Rat) Antibody	P019-568ST-500	500 uL
ExoBrite™ STORM CF@647Plus CD81 (Mouse/Rat) Antibody	P019-647PST-500	500 uL

Note: ExoBrite™ STORM Antibody Conjugates are supplied at 100 ug/mL.

Storage and Handling

Store at 4°C, protected from light. Product is stable for at least 24 months from date of receipt when stored as recommended.

Note: Storage of the antibody for more than a day at final working dilution is not recommended.

Product Description

ExoBrite™ STORM Antibody Conjugates were developed by Biotium for detection of the most commonly used EV markers, CD9, CD63, and CD81, on EVs by Stochastic Optical Reconstruction Microscopy (STORM). The antibodies were carefully selected and validated for robust detection of isolated EVs, and 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 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 antibody conjugates may be adapted into typical workflows for the staining and imaging of EVs using STORM (1-3). Additionally, ExoBrite™ STORM Antibodies are compatible with co-staining with other fluorescently labeled antibodies or for bead-bound EV staining protocols.

References

1. J Extracellular Vesicles, 11, e12215 (2022);
2. J Extracellular Biology, 3, e70016 (2024);
3. Neuropathol Appl Neurobiol, 47, 127 (2021).

Table 1. Antibody Attributes

Antibody	Target	Host	Species Reactivity	Target MW	Isotype	Entrez Gene ID	SwissProt	Unigene	Synonyms	Target Localization
ExoBrite™ STORM CD9 Antibody	CD9	Mouse	Human, Baboon, Bovine, Cynomolgus monkey, Dog, Horse, Rabbit, Non-human primates, Sheep	24 kDa	IgG1, kappa	928	P21926	114286	Tspan-29, MRP-1	Exosomes/ EVs, Plasma membrane
ExoBrite™ STORM CD9 (Mouse) Antibody	CD9	Rat	Mouse	24 kDa	IgG2a, kappa	12527	P40240	-	DRAP-27, MRP-1, p-24	
ExoBrite™ STORM CD63 Antibody	CD63	Mouse	Human, Baboon, Cynomolgus monkey, Non-human primates	26 kDa (core protein); 30-60 kDa (glycosylated)	IgG1, kappa	967	P08962	445570	Tspan-30, LAMP-3, gp55	Exosomes/ EVs, Lysosomes, Plasma membrane, Membrane/ vesicular, Multivesicular bodies
ExoBrite™ STORM CD63 (Mouse) Antibody	CD63	Rat	Mouse	53 kDa	IgG2a, kappa	12512	P41731	-	LIMP, LAMP-3, gp55, ME491	
ExoBrite™ STORM CD81 Antibody	CD81	Mouse	Human, Baboon, Cynomolgus monkey, Non-human primates, Mouse (low reactivity)	26 kDa	IgG1, kappa	975	P60033	54457	Tspan-28, TAPA-1	Exosomes/ EVs, Plasma membrane
ExoBrite™ STORM CD81 (Mouse/Rat) Antibody	CD81	Hamster	Mouse, Rat	26 kDa	IgG1, kappa	12520 (mouse), 25621 (rat)	P35762 (mouse), Q62745 (rat)	-	TAPA-1	

Considerations for Staining with ExoBrite™ STORM Antibody Conjugates

- For best results, buffers used for suspending and staining EVs should be filtered through a 0.2 um filter to remove particulates.
- ExoBrite™ STORM Antibodies can be incorporated into existing EV STORM protocols.
- ExoBrite™ STORM Antibodies have not been validated for labeling EVs for cellular uptake. It may be necessary to remove unbound antibodies (by washing, for example) before attempting to apply ExoBrite™-labeled EVs to cells.

Table 2. Detection Settings for ExoBrite™ STORM Antibodies

Conjugate	Ex/Em (nm)	Laser Line(s) (nm)	Detection Channel
ExoBrite™ STORM CF@498	498/519	488	FITC
ExoBrite™ STORM CF@568	562/584	532, 555, or 561	Cy@3
ExoBrite™ STORM CF@583R	585/609	555 or 561	Texas Red@
ExoBrite™ STORM CF@647Plus	652/668	633-640	Cy@5

Related Products

Cat. No.	Product
30115-30118	ExoBrite™ STORM CTB EV Staining Kits
20794...20994	Donkey Anti-Mouse IgG (H+L), Highly Cross-Adsorbed, CF® Dye Conjugates, Single Label for STORM
20792...20996	Goat Anti-Mouse IgG (H+L), Highly Cross-Adsorbed, CF® Dye Conjugates, Single Label for STORM
92550-92557	Mix-n-Stain™ STORM CF® Dye Antibody Labeling Kits
92131	CF®568 SE Ester
96084	CF®583R SE Ester
92135	CF®647 SE Ester
P003-410... P003-RPE	ExoBrite™ CD9 Flow Antibodies
P004-410... P004-RPE	ExoBrite™ CD63 Flow Antibodies
P005-410... P005-RPE	ExoBrite™ CD81 Flow Antibodies
P018-410... P018-640	ExoBrite™ CD9 (Mouse) Flow Antibodies
P022-410... P022-640	ExoBrite™ CD63 (Mouse) Flow Antibodies
P019-410... P019-640	ExoBrite™ CD81 (Mouse) Flow Antibodies
P003-680, P003-770	ExoBrite™ CD9 Western Antibodies
P004-680, P004-770	ExoBrite™ CD63 Western Antibodies
P006-680, P006-770	ExoBrite™ CD81 Western Antibodies
30129, 30137	ExoBrite™ True EV Membrane Stains
30111-30114	ExoBrite™ CTB EV Staining Kits
28002	ExoBrite™ EV Stain Enhancer
30123-30126	ExoBrite™ WGA EV Staining Kits
30119-30122	ExoBrite™ Annexin EV Staining Kits
28000	ExoBrite™ Streptavidin Magnetic Beads
28001	ExoBrite™ EV Total RNA Isolation Kit

Please visit our website at www.biotium.com for information on our products for EV detection and western blotting, including EV stains and antibodies for flow cytometry, western blot blocking buffers, and total protein stains.

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