

ExoBrite™ EV Total RNA Isolation Kit

Optimized and easy-to-use kit for extracting total RNA, including mRNA and miRNA, from purified EVs for downstream analysis in qPCR or RNAseq.



Product attributes

Product Description

Obtaining high yields of quality RNA from extracellular vesicles (EVs) is a challenge due to the dilute nature of EV samples and low RNA content within EVs. In addition, short non-coding RNAs within EVs, such as miRNAs, are commonly studied as biomarkers and often require specialized methods for efficient extraction. The ExoBrite™ EV Total RNA Isolation Kit was designed to address these challenges by offering an optimized and easy-to-use kit for total RNA isolation, including mRNA and miRNA, from purified EVs. The isolated EV RNA can then be used for downstream analysis such as qPCR or RNAseq.

The RNA isolation procedure is a simple column purification method that takes as little as 20 minutes and requires no phenol/chloroform or ethanol precipitation steps. The kit is estimated to recover ~10-20 ng of RNA from 1×10^{10} SEC-enriched EVs. The amount of RNA recovered will depend primarily on EV number and quality, which may be affected by purification method, storage conditions, and number of freeze thaws. An optional, but recommended, DNase treatment step is used to remove contaminating DNA.

See below our full catalog of ExoBrite™ stains and antibodies developed for EV analysis by flow cytometry, western blotting, or super-resolution imaging.

Full List of ExoBrite™ Products for EV Research

Product	Conjugate	Detection channels	Size	Catalog Number
ExoBrite™ True EV Membrane Stains	N/A	FITC, PE	100 Labelings, 500 Labelings	30129_30130
ExoBrite™ Annexin EV Staining Kits	Annexin V	Pacific Blue™, FITC, PE, Cy@3, APC	100 Labelings, 500 Labelings	30119-30122
ExoBrite™ WGA EV Staining Kits	Wheat Germ Agglutinin (WGA)	30123-30126		
ExoBrite™ CTB EV Staining Kits	Cholera Toxin Subunit B (CTB)	30111-30114		
ExoBrite™ EV Surface Stain Sampler Kit, Green	Annexin V, Wheat Germ Agglutinin (WGA), Cholera Toxin Subunit B (CTB)	FITC	100 Labelings	30127
ExoBrite™ STORM CTB EV Staining Kits	Cholera Toxin Subunit B (CTB)	FITC, Texas Red®, Cy@5, Cy@5.5	100 Labelings, 500 Labelings	30115-30118
ExoBrite™ CD9 Flow Antibody	ExoBrite™ 410/450 ExoBrite™ 490/515 ExoBrite™ 560/585 ExoBrite™ R-PE	Pacific Blue™ FITC PE	25 tests 100 tests	P003-410... P003-RPE
ExoBrite™ CD63 Flow Antibody	P004-410... P004-RPE			
ExoBrite™ CD81 Flow Antibody	P005-410... P005-RPE			
ExoBrite™ IgG1 Isotype Control Flow Antibody	P008-410... P008-RPE			
ExoBrite™ CD9 Western Antibody	ExoBrite™ 680/700 ExoBrite™ 770/800	700 channel Far-red channel	25 tests 100 tests	P003-680, P003-770
ExoBrite™ CD63 Western Antibody	P004-680, P004-770			
ExoBrite™ CD81 Western Antibody	P006-680, P006-770			
ExoBrite™ Calnexin Western Antibody	ExoBrite™ 770/800	800 channel NIR channel		P007-770
ExoBrite™ Streptavidin Magnetic Beads	N/A	N/A	5 mL	28000