

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 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 |