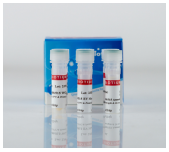
# ExoBrite™ EV Surface Stain Sampler Kit, Green



Kit includes each of ExoBrite™ 490/515 EV Surface Stains (CTB, WGA, and Annexin V) for assessing which stain offers the best coverage for EV samples of interest.

### Product attributes

| | |
|---|---|
| **Dye** | ExoBrite™ 490/515 |
| **Colors** | Green |

## Product Description

The ExoBrite™ EV Surface Stain Sampler Kit, Green was developed to offer each of Biotium's ExoBrite™ EV Surface Stains (CTB, WGA, and Annexin V) for assessing which stain offers the best coverage for the EV samples of interest.

### Bright & Specific EV Staining with Minimal Aggregation

ExoBrite™ EV Surface Stains are conjugates of probes for labeling EV membrane surface targets using Biotium's unique fluorescent dyes for superior brightness and specificity. The stains were designed to overcome some of the challenges of EV detection, particularly in flow cytometry. For example, some lipophilic membrane dyes used to stain EVs can form aggregates of a similar size as exosomes or EVs, thus confounding analysis. ExoBrite™ EV stains have been formulated for bright and specific staining of EV surface targets with minimal aggregation in flow cytometry. In addition, ExoBrite™ EV Stains do not bind non-specifically to polystyrene beads, and therefore unlike hydrophobic membrane dyes, they can be used to stain bead-bound EVs.

### A Convenient Sampler Kit for Comparing Samples

A major issue for EV detection includes varying signal and coverage using tetraspanin antibody staining of EVs isolated from different cell types or biological fluids. The ExoBrite™ EV Surface Stain Sampler Kit, Green includes each of Biotium's ExoBrite™ EV Surface Stains (CTB, WGA, and Annexin V) to allow users to assess which stain(s) offer the best coverage for their EV samples. ExoBrite™ CTB EV Stains are conjugates of cholera toxin subunit B (CTB), which binds to GM1 gangliosides that are found on the surface of mammalian lipid rafts and some EV populations. ExoBrite™ WGA EV Stains are uniquely formulated conjugates of wheat germ agglutinin (WGA), a carbohydrate-binding lectin with high affinity for N-acetylglucosamine moieties of glycoproteins frequently exposed on EV membranes. ExoBrite™ Annexin V EV Stains is a calcium-dependent phospholipid-binding protein with high affinity for phosphatidyleserine (PS), which is exposed on the surface of apoptotic cells and also used as a marker for EV from a variety of sources.

EVs are often labeled with fluorescent antibodies targeting one or more of the tetraspanin proteins CD9, CD63, and CD81. ExoBrite™ EV Stains can be combined with antibody staining, for multi-parameter analysis. Biotium offers a selection of fluorescent ExoBrite™ Flow Antibodies against CD9, CD63, and CD81 that are optimized for detection of free or bead-bound EVs by flow cytometry.

**Notes:**

1. ExoBrite™ EV Stains have been found to label EVs derived from several tested cell lines (see Validated EV Sources below), but may not stain EVs from every source.
2. 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.

# Validated EV Sources for ExoBrite™ EV Surface Stains

| EV Source | ExoBrite™ True EV Membrane Stains | ExoBrite™ CTB Stains | ExoBrite™ WGA Stains | ExoBrite™ Annexin Stains |
|---|---|---|---|---|
| A549 cells | Yes | Yes | Yes | Yes |
| CHO cells | Yes | No | Yes | Yes |
| hASC (human adipose stem cells) | ND | No[1] | ND | ND |
| HEK293 cells | Yes | Yes[1] | Yes | ND |
| HeLa cells | Yes | No | Yes | Yes |
| HUVEC (human umbilical vein endothelial cells) | ND | No[1] | ND | ND |
| J774 cells | Yes | Yes | Yes | Yes |
| Jurkat cells | Yes | Yes | Yes | Yes |
| MCF-7 cells | Yes | Yes | Yes | Yes |
| Plasma | ND | No | ND | Yes |
| Raji cells | ND | Yes | Yes | Yes |
| RAW 264.7 cells | Yes | ND | ND | ND |
| Serum | ND | No | ND | Yes |
| Skeletal myoblasts | ND | Yes[1] | ND | ND |
| THP-1 cells | Yes | ND | ND | ND |
| U2OS cells | Yes | No | Yes | Yes |
| U937 cells | Yes | No | Yes | Yes |
| NIH3T3 cells | Yes | ND | ND | ND |
| HepG2 cells | ND | ND | Yes | ND |
| Yeast (S. cerevisiae) | Yes | No | Yes | Yes |

[1]Customer-reported data
Value of “Yes” or “No” indicates coverage of EVs based on Biotium’s internal data or customer-reported data. Value of “ND” indicates no data.

### Biotium also offers other validated ExoBrite™ reagents for flow cytometry, western blotting, or super-resolution imaging.

Learn about Biotium’s new ExoBrite™ True EV Membrane Stains. These genuine lipophilic membrane dyes are designed for superior pan-EV labeling over other membrane dyes including PKH, DiO, DiI, and DiD. Biotium also offers ExoBrite™ Antibody Conjugates for optimal detection of CD9, CD63, and CD81 EV markers by flow cytometry and western blotting. For super-resolution imaging by STORM, learn about our ExoBrite™ STORM CTB EV Staining Kits available in four CF® Dyes validated for STORM.

This datasheet was generated on January 19, 2026 at 01:04:37 AM. Visit product page to check for updated information before use.
Product link: https://biotium.com/product/exobrite-ev-surface-stain-sampler-kit-green/