**Product Information**

- **Material Number:** 563180
- **Alternate Name:** EPCAM; EGP; ESA; GA733-2; hEGP-2; KSA; M4S1; MIC18; MK-1; TACSTD1; TROP
- **Size:** 50 tests
- **Vol. per Test:** 5 µl
- **Clone:** EBA-1
- **Immunogen:** Breast carcinoma-associated mucin BCA-225
- **Isotype:** Mouse (BALB/c) IgG1, λ
- **Reactivity:** QC Testing: Human
- **Storage Buffer:** Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

**Description**

The EBA-1 monoclonal antibody specifically binds to human CD326. CD326 is an approximately 40 kDa type 1 transmembrane glycoprotein and adhesion molecule. CD326 is also known as epithelial adhesion molecule (EpCAM), epithelial glycoprotein 2 (EGP-2), and epithelial surface antigen (ESA). The epithelial cells present in non-squamous epithelia and tumors derived from such cells show EpCAM expression. The normal epithelial cells reactive with anti-EpCAM antibodies are those present in the (lower) respiratory tract; the (lower) gastrointestinal tract; tubules in the kidney; the surface epithelium of the ovary; the exocrine and endocrine pancreas; secondary germ cells of telogenic hair follicles; and secretory tubules of sweat glands in the skin, whereas the epidermis is negative. In addition, all epithelial cells in the thyroid and epithelial cells in the thymus show EpCAM expression, while the outer cortex and Hassall’s corpuscles have low expression. In the liver, only the bile ducts appear to be positive with anti-EpCAM antibodies. Non-squamous carcinoma cells have high EpCAM expression; some squamous carcinoma cells. Tumors arising from non-epithelial cells, such as lymphoma, mesothelioma, neuroblastoma, and melanoma, do not express EpCAM.

The antibody was conjugated to BD Horizon™ BV421 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD Horizon™ BV421 can be excited by the violet laser and detected in the standard Pacific Blue™ filter set (eg, 450/50-nm filter). BD Horizon™ BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.

**Preparation and Storage**

- Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
- The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
- The antibody was conjugated with BD Horizon™ BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.

**Application Notes**

**Application**

<table>
<thead>
<tr>
<th>Application</th>
<th>Routinely Tested</th>
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<td>Flow cytometry</td>
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**Flow cytometric analysis of CD326 expression on human SK-BR-3 cells.** Human SK-BR-3 breast carcinoma cells (Cat. No. ATCC® HTB-30™) were stained with BD Horizon™ BV421 Mouse Anti-Human CD326 antibody (Cat. No. 563180; solid line histogram) or with a BD Horizon™ BV421 Mouse IgG1, κ Isotype Control (Cat. No. 562438; dashed line histogram). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable cells. Flow-cytometric analysis was performed using a BD™ LSR II Flow Cytometer System.
Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 ml</td>
<td>(none)</td>
</tr>
<tr>
<td>562438</td>
<td>BV421 Mouse IgG1, k Isotype Control</td>
<td>50 µg</td>
<td>X40</td>
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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^6$ cells in a 100-µl experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
8. Brilliant Violet™ 421 is a trademark of Sirigen.

References


