

# Technical Data Sheet

## BUV496 Mouse Anti-Human CD326

### Product Information

Material Number:	749909
Size:	50 µg
Clone:	EBA-1
Alternative Name:	EPCAM; EGP; ESA; GA733-2; hEGP-2; KSA; M4S1; MIC18; MK-1; TACSTD1; TROP1
Reactivity:	Human (Tested in Development)
Isotype:	Mouse BALB/c IgG1, λ
Immunogen:	Breast carcinoma-associated mucin BCA-225
Application:	Flow cytometry (Qualified)
Concentration:	0.2 mg/ml
Entrez Gene ID:	4072
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

### Description

The EBA-1 monoclonal antibody specifically binds to human CD326. CD326 is an approximately 40 kDa type 1 transmembrane glycoprotein and adhesion molecule that mediates intercellular adhesive interactions. 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™ BUV496 which is part of the BD Horizon Brilliant™ Ultraviolet family of dyes. This dye is a tandem fluorochrome of BD Horizon BUV395 with an Ex Max of 348-nm and an acceptor dye with an Em Max at 496-nm. BD Horizon BUV496 can be excited by the ultraviolet laser (355 nm) and detected with a 515/30 nm filter with a 450LP. Due to the excitation of the acceptor dye by other laser lines, there may be significant spillover into the channel detecting BD Horizon V500 or BV510 (eg, 525/40-nm filter). However, the spillover can be corrected through compensation as with any other dye combination.

### 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 BUV496 under optimal conditions that minimize unconjugated dye and antibody.

### Recommended Assay Procedure

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes (including BD OptiBuild Brilliant reagents) are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794).

### Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	

554657	Stain Buffer (BSA)	500 mL	
563794	Brilliant Stain Buffer	100 Tests	
555899	Lysing Buffer	100 mL	
349202	Lysing Solution 10X Concentrate	100 NA	
564219	Human BD Fc Block™	50 mg	
612949	BUV496 Mouse IgG1, κ Isotype Control	50 µg	X40

## Product Notices

1. This antibody was developed for use in flow cytometry.
2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.
3. Researchers should determine the optimal concentration of this reagent for their individual applications.
4. 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](http://www.bdbiosciences.com/colors).
7. Please refer to [www.bdbiosciences.com/us/s/resources](http://www.bdbiosciences.com/us/s/resources) for technical protocols.
8. BD Horizon Brilliant Stain Buffer is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,575,303; 8,354,239.
9. BD Horizon Brilliant Ultraviolet 496 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,575,303; 8,354,239.

## References

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