

## Brilliant Violet 750™ anti-human CD326 (Ep-CAM) Antibody

<b>Catalog# / Size</b>	324257 / 25 tests
<b>Clone</b>	9C4
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Ep-CAM, tumor associated calcium signal transducer 1, epithelial cell surface antigen, epithelial glycoprotein 2, EGP2, adenocarcinoma associated antigen, TROP1
<b>Isotype</b>	Mouse IgG2b, $\kappa$
<b>Description</b>	CD326 is also known as Ep-CAM, tumor associated calcium signal transducer 1, epithelial cell surface antigen, epithelial glycoprotein 2, EGP2, adenocarcinoma associated antigen, and TROP1. CD326 is a type I transmembrane protein containing six disulfide bridges and one THYRO domain. This cell surface glycosylated 40 kD protein is highly expressed in bone marrow, colon, lung, and most normal epithelial cells and is expressed on carcinomas of gastrointestinal origin. Recently, it has been reported that CD326 expression occurs during the early steps of erythropoiesis. CD326 functions as a homotypic calcium-independent cell adhesion molecule and is believed to be involved in carcinogenesis by its ability to induce genes involved in cellular metabolism and proliferation. CD326 antigen is an immunotherapeutic target for the treatment of human carcinomas.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	DU.4475 breast carcinoma
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 750™ under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ L per million cells in 100 $\mu$ L staining volume or 5 $\mu$ L per 100 $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 750™ excites at 405 nm and emits at 750 nm. The bandpass filter 780/60 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 750™ is a trademark of Sirigen Group Ltd.

[Learn more about Brilliant Violet™.](#)

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prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**Excitation Laser** Violet Laser (405 nm)

**Application Notes** Additional reported applications (for the relevant formats) include: immunofluorescence, immunohistochemistry<sup>3</sup>, and spatial biology (IBEX)<sup>4,5</sup>.

**Application References**

(PubMed link indicates BioLegend citation)

1. Lammers R, *et al.* 2002. *Exp. Hematol.* 30:537.
2. Schultz LD, *et al.* 2010. *P. Natl. Acad. Sci. USA* 107:13022. [PubMed](#)
3. Human Protein Atlas <http://www.proteinatlas.org/ENSG00000119888/antibody> (IHC)
4. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA.* 117:33455-33465. (SB) [PubMed](#)
5. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

## Antigen Details

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<b>Structure</b>	Type I transmembrane protein, contains six disulfide bridges, one THYRO domain, approximate molecular weight 40 kD.
<b>Distribution</b>	Highly expressed in bone marrow, colon, lung, and most normal epithelial cells. Also highly expressed on carcinomas of gastrointestinal origin. Expressed during early erythropoiesis.
<b>Function</b>	Homotypic calcium-independent cell adhesion. CD326 is believed to be involved in carcinogenesis by its ability to induce genes involved in cellular metabolism and proliferation.
<b>Modification</b>	Glycosylated.
<b>Cell Type</b>	Embryonic Stem Cells, Epithelial cells
<b>Biology Area</b>	Cell Biology, Immunology, Stem Cells
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Strnad J, <i>et al.</i> 1989. <i>Cancer Res.</i> 49:314.</li><li>2. Munz M, <i>et al.</i> 2004. <i>Oncogene</i> 23:5748.</li><li>3. Rao CG, <i>et al.</i> 2005. <i>Int. J. Oncol.</i> 27:49.</li></ol>
<b>Gene ID</b>	<a href="#">4072</a>

## Related Protocols

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- [Cell Surface Flow Cytometry Staining Protocol](#)

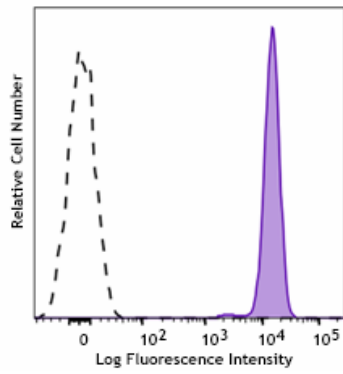
## Other Formats

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Purified anti-human CD326 (EpCAM), FITC anti-human CD326 (EpCAM), PE anti-human CD326 (EpCAM), APC anti-human CD326 (EpCAM), Alexa Fluor® 488 anti-human CD326 (EpCAM), Alexa Fluor® 647 anti-human CD326 (EpCAM), PerCP/Cyanine5.5 anti-human CD326 (EpCAM), Biotin anti-human CD326 (EpCAM), Pacific Blue™ anti-human CD326 (EpCAM), Brilliant Violet 421™ anti-human CD326 (EpCAM), PE/Cyanine7 anti-human CD326 (EpCAM), Brilliant Violet 605™ anti-human CD326 (EpCAM), Brilliant Violet 650™ anti-human CD326 (EpCAM), Alexa Fluor® 594 anti-human CD326 (EpCAM), Purified anti-human CD326 (EpCAM) (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD326 (EpCAM), APC/Fire™ 750 anti-human CD326 (EpCAM), Brilliant Violet 510™ anti-human CD326 (EpCAM), Brilliant Violet 785™ anti-human CD326 (EpCAM), Brilliant Violet 711™ anti-human CD326 (Ep-CAM), TotalSeq™-A0123 anti-human CD326 (Ep-CAM), APC/Cyanine7 anti-human CD326 (Ep-CAM), Alexa Fluor® 700 anti-human CD326 (EpCAM), TotalSeq™-C0123 anti-human CD326 (Ep-CAM), TotalSeq™-B0123 anti-human CD326 (Ep-CAM), PE/Cyanine5 anti-human CD326 (Ep-CAM), TotalSeq™-D0123 anti-human CD326 (Ep-CAM), Spark UV™ 387 anti-human CD326 (Ep-CAM), Spark Red™ 718 anti-human CD326 (Ep-CAM) (Flexi-Fluor™), Spark Blue™ 574 anti-human CD326 (Ep-CAM) (Flexi-Fluor™), Spark Blue™ 550 anti-human CD326 (Ep-CAM) (Flexi-Fluor™), Brilliant Violet 750™ anti-human CD326 (Ep-CAM), Spark PLUS UV395™ anti-human CD326 (Ep-CAM), PE anti-human CD326

## Product Data

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Human colon carcinoma cell line HT-29 was stained with anti-human CD326 (Ep-CAM) (clone 9C4) Brilliant Violet 750™ (filled histogram) or mouse IgG2b, κ Brilliant Violet 750™ isotype control (open histogram).

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