

# APC anti-human CD326 (EpCAM) Antibody

Catalog# / Size	324207 / 25 tests 324208 / 100 tests
Clone	9C4
Other Names	Ep-CAM, tumor associated calcium signal transducer 1, epithelial cell surface antigen, epithelial glycoprotein 2, EGP2, adenocarcinoma associated antigen, TROP1
Isotype	Mouse IgG2b, к
Description	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 erythrogenesis. 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**

Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	DU.4475 breast carcinoma
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions.
Concentration	Lot-specific (please contact technical support for concentration and total µg amount, or use our Lookup tool if you have a lot number.)
Storage & Handling	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>
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. 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.
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications (for the revelant formats) include: immunofluorescence and immunohistochemistry <sup>3</sup> .
Application References (PubMed link indicates BioLegend citation)	<ol> <li>Lammers R, et al. 2002. Exp. Hematol. 30:537.</li> <li>Schultz LD, et al. 2010. P. Natl. Acad. Sci. USA 107:13022. PubMed</li> <li>Human Protein Atlas http://www.proteinatlas.org/ENSG00000119888/antibody (IHC)</li> </ol>
Product Citations	<ol> <li>Shultz L, et al. 2010. Proc Natl Acad Sci U S A. 107:13022. PubMed</li> <li>Skrbo N, et al. 2014. PLoS One. 9:113278. PubMed</li> <li>Nelson L, et al. 2015. Sci Rep. 5: 17455. PubMed</li> <li>Haraguchi T, et al. 2016. Sci Rep. 6:21117. PubMed</li> <li>Menck K, et al. 2017. J Extracell Vesicles. 10.1080/20013078.2017.1340745. PubMed</li> <li>Apostolou P, Ntanovasilis D, and Papasotiriou I. 2017. J Biol Res (Thessalon). 10.1186/s40709-017 -0068-9. PubMed</li> <li>Chua CW, et al. 2018. Elife. 7. PubMed</li> <li>Puca L, et al. 2018. Nat Commun. 9:2404. PubMed</li> <li>Gao Q, et al. 2017. J Exp Med. 216:688. PubMed</li> <li>Chen D, et al. 2017. Biol Reprod. 97:850. PubMed</li> <li>Enge M, et al. 2017. Cell. 171:321. PubMed</li> </ol>

AB\_756081 (BioLegend Cat. No. 324207) AB\_756082 (BioLegend Cat. No. 324208)

**Antigen Details** 

Structure	Type I transmembrane protein, contains six disulfide bridges, one THYRO domain, approximate molecular weight 40 kD.
Distribution	Highly expressed in bone marrow, colon, lung, and most normal epithelial cells. Also highly expressed on carcinomas of gastrointestinal origin. Expressed during early erythrogenesis.
Function	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.
Modification	Glycosylated.
Cell Type	Embryonic Stem Cells, Epithelial cells
Biology Area	Cell Biology, Immunology, Stem Cells
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Strnad J, et al. 1989. Cancer Res. 49:314. 2. Munz M, et al. 2004. Oncogene 23:5748. 3. Rao CG, et al. 2005. Int. J. Oncol. 27:49.
Gene ID	4072

## **Related Protocols**

Cell Surface Flow Cytometry Staining Protocol

### **Other Formats**

Purified anti-human CD326 (EpCAM), FITC anti-human CD326 (EpCAM), PE anti-human CD326 (EpCAM), Alexa Fluor® 488 antihuman CD326 (EpCAM), Alexa Fluor® 647 anti-human CD326 (EpCAM), PerCP/Cyanine5.5 anti-human CD326 (EpCAM), Biotin antihuman CD326 (EpCAM), Pacific Blue™ anti-human CD326 (EpCAM), Brilliant Violet 421<sup>™</sup> anti-human CD326 (EpCAM), PE/Cyanine7 anti-human CD326 (EpCAM), Brilliant Violet 605<sup>™</sup> anti-human CD326 (EpCAM), Brilliant Violet 650<sup>™</sup> anti-human CD326 (EpCAM), Alexa Fluor® 594 anti-human CD326 (EpCAM), Purified anti-human CD326 (EpCAM), Maxpar® Ready), PE/Dazzle<sup>™</sup> 594 anti-human CD326 (EpCAM), APC/Fire<sup>™</sup> 750 anti-human CD326 (EpCAM), Brilliant Violet 510<sup>™</sup> anti-human CD326 (EpCAM), Brilliant Violet 715<sup>™</sup> anti-human CD326 (EpCAM), APC/Fire<sup>™</sup> 750 anti-human CD326 (EpCAM), Brilliant Violet 510<sup>™</sup> anti-human CD326 (EpCAM), Brilliant Violet 711<sup>™</sup> anti-human CD326 (EpCAM), TotalSeq<sup>™</sup>-A0123 anti-human CD326 (Ep-CAM), APC/Cyanine7 anti-human CD326 (Ep-CAM), Alexa Fluor® 700 anti-human CD326 (EpCAM), TotalSeq<sup>™</sup>-C0123 anti-human CD326 (Ep-CAM), -CAM), TotalSeq<sup>™</sup>-B0123 anti-human CD326 (Ep-CAM)

#### **Product Data**



Human colon carcinoma cell line HT29 stained with 9C4 APC

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