

PE anti-human CD324 (E-Cadherin) Antibody

Catalog# / Size	361803 / 25 tests 361804 / 100 tests
Clone	A18180C
Regulatory Status	RUO
Other Names	E-Cadherin, cadherin-1, UVO
Isotype	Mouse IgG1, κ
Description	<p>The A18180C antibody recognizes human CD324 also known as E-cadherin, cadherin-1, and UVO. CD324, a member of the cadherin superfamily, is a calcium-dependent, transmembrane cell-cell adhesion glycoprotein composed of 4 extracellular cadherin repeats and a highly conserved cytoplasmic tail region with a predicted molecular weight of approximately 100 kD. CD324 is widely expressed in epithelial cells in the colon, uterus, liver, keratinocytes, brain, heart, muscle, kidney, and pancreas, as well as erythroid cells. CD324 functions as a cell adhesion molecule involved in development, bacterial pathogenesis, and tumor invasion. In bacterial pathogenesis, the ectodomain of CD324 mediates bacterial adhesion to mammalian cells, while the cytoplasmic domain is required for internalization. CD324 binds to the $\alpha E\beta 7$ integrin to mediate cell adhesion and also interacts with a number of intracellular proteins including including erbin, ezrin, caspase-3, caspase 8, β-catenin, presenilin 1, casein kinase II, as well as other extracellular proteins including the EGF receptor. CD324 is phosphorylated on multiple residues (S857, S866, S870, S872), and can be proteolytically cleaved at residue D769 by caspase-3. The A18180C antibody has been shown to be useful for flow cytometry.</p>

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant protein aa#155-707
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
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 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
RRID	AB_3675083 (BioLegend Cat. No. 361803) AB_3675083 (BioLegend Cat. No. 361804)

Antigen Details

Structure	Member of the cadherin superfamily. Calcium-dependent, transmembrane cell-cell adhesion glycoprotein composed of 4 extracellular cadherin repeats and a highly conserved cytoplasmic tail
------------------	---

region. Predicted molecular weight approximately 100 kD.

Distribution	Widely expressed in epithelial cells in the colon, uterus, liver, keratinocytes, brain, heart, muscle, kidney, and pancreas, as well as erythroid cells
Function	Cell adhesion molecule involved in development, bacterial pathogenesis, and tumor invasion. The ectodomain of CD324 mediates bacterial adhesion to mammalian cell, while the cytoplasmic domain is required for internalization.
Interaction	Interacts with a variety of proteins including erbin, ezrin, caspase-3, caspase 8, EGF receptor, β -catenin, presenilin 1, casein kinase II, and others
Ligand/Receptor	α E β 7 integrin
Cell Type	Embryonic Stem Cells, Epithelial cells, Erythrocytes
Biology Area	Cell Biology, Immunology, Neuroscience, Stem Cells, Synaptic Biology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none">1. Overduin M, <i>et al.</i> 1995. <i>Science</i>. 267:386-9.2. Boggon TJ, <i>et al.</i> 2002. <i>Science</i>. 296:1308-13.3. Berx G, <i>et al.</i> 1995. <i>EMBO J.</i> 14:6107-15.4. Perl AK, <i>et al.</i> 1998. <i>Nature</i>. 392:190-3.

Gene ID [999](#)

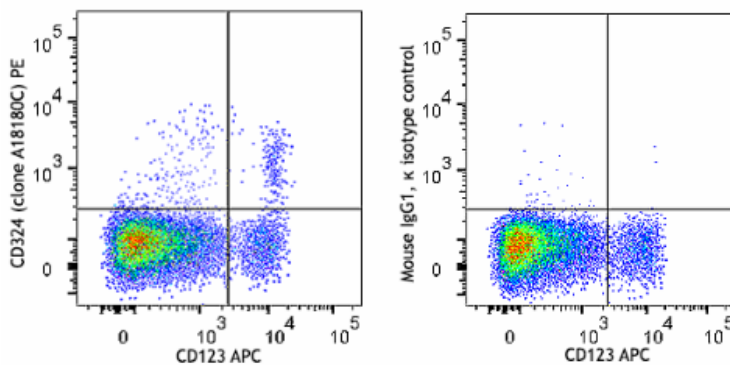
Related Protocols

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

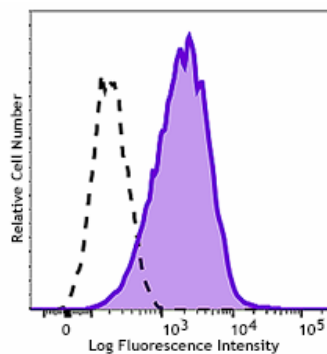
Other Formats

Purified anti-human CD324 (E-Cadherin) Antibody, PE anti-human CD324 (E-Cadherin)

Product Data



Human peripheral blood mononuclear cells were stained with anti-human CD123 (clone 6H6) APC and anti-human CD324 (E-Cadherin) (clone A18180C) PE (left) or mouse IgG1, κ PE isotype control (right). Data shown was gated on lymphocytes and monocytes.



Human breast cancer cells, MCF-7, were stained with anti-human CD324 (E-Cadherin) (clone A18180C) PE (filled histogram) or mouse IgG1, κ PE isotype control (open histogram).

For Research Use Only. Not for diagnostic or therapeutic use.

This product is supplied subject to the terms and conditions, including the limited license, located at www.biolegend.com/terms ("Terms") and may be used only as provided in the Terms. Without limiting the foregoing, BioLegend products may not be used for any Commercial Purpose as defined in the Terms, resold in any form, used in manufacturing, or reverse engineered, sequenced, or otherwise studied or used to learn its design or composition without express written approval of BioLegend. Regardless of the information given in this document, user is solely responsible for determining any license requirements necessary for user's intended use and assumes all risk and liability arising from use of the product. BioLegend is not responsible for patent infringement or any other risks or liabilities whatsoever resulting from the use of its products.

BioLegend, the BioLegend logo, and all other trademarks are property of BioLegend, Inc. or their respective owners, and all rights are reserved.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587