

Brilliant Violet 421™ anti-human CD146 Antibody

Catalog# / Size	361003 / 25 tests 361004 / 100 tests
Clone	P1H12
Regulatory Status	RUO
Workshop	HCDM listed
Other Names	Muc-18, MCAM, Mel-CAM, S-endo
Isotype	Mouse IgG1, κ
Description	CD146 is a 118 kD integral transmembrane glycoprotein that is also known as MUC18, S-Endo, MCAM, and Mel-CAM (melanoma cell adhesion molecule). It belongs to the immunoglobulin superfamily. CD146 is expressed on melanoma cells, epithelial cells, endothelial cells, fibroblasts, activated T cells, multipotent mesenchymal stromal cells, and activated keratinocytes. CD146 mediates heterophilic cell adhesion and regulates monocyte transendothelial migration. The ligand of CD146 remains to be identified.

Product Details

Verified Reactivity	Human
Reported Reactivity	Mouse, Dog, Rabbit
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Cultured human umbilical cells
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 Brilliant Violet 421™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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	<p>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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.</p> <p>Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
Excitation Laser	Violet Laser (405 nm)
Application Notes	Additional reported applications (for the relevant formats of this clone) include: Western blotting ³ and IHC ^{1,5} .

Clone P1H12 cross-reacts to Dog^{2, 5}.

Application References

1. Solovey A, *et al.* 1997. *N. Engl. J. Med.* 337:1584. (FC, IHC)
2. Lamerato-Kozicki AR, *et al.* 2006. *Exp. Hematol.* 34:870. (FC)
3. Balint K, *et al.* 2005. *J. Clin. Invest.* 115:3166. (WB)
4. Neskey DM, *et al.* 2008. *J. Exp. Clin. Cancer Res.* 27:61. (ELISA)
5. Kamstock D, *et al.* 2006. *Cancer Gene Therap.* 13:306. (IHC)

RRID

AB_2562966 (BioLegend Cat. No. 361003)
AB_2629848 (BioLegend Cat. No. 361004)

Antigen Details

Structure	118 kD integral glycoprotein, Ig superfamily
Distribution	Melanoma cells, epithelial cells, endothelial cells, activated T cells, multipotent mesenchymal stromal cells
Function	Adhesion, monocytes transendothelial migration
Cell Type	Endothelial cells, Epithelial cells, Mesenchymal cells, Mesenchymal Stem Cells, T cells
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers, Stem Cells
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none">1. Pickl WF, <i>et al.</i> 1997. <i>J. Immunol.</i> 158:2107.2. Weninger W, <i>et al.</i> 2000. <i>J. Invest. Dermatol.</i> 115:219.3. Sorrentino A, <i>et al.</i> 2008. <i>Exp. Hematol.</i> 36:1035.4. Bardin N, <i>et al.</i> 2009. <i>Arterioscler. Thromb. Vasc. Biol.</i> 29:746.
Gene ID	4162

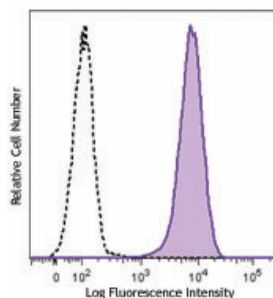
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE anti-human CD146, Purified anti-human CD146, Brilliant Violet 421™ anti-human CD146, PE/Cyanine7 anti-human CD146, PerCP/Cyanine5.5 anti-human CD146, FITC anti-human CD146, Alexa Fluor® 647 anti-human CD146, APC anti-human CD146, TotalSeq™-A0134 anti-human CD146, Brilliant Violet 605™ anti-human CD146, Brilliant Violet 510™ anti-human CD146, Alexa Fluor® 488 anti-human CD146, APC/Fire™ 750 anti-human CD146, PE/Dazzle™ 594 anti-human CD146, Brilliant Violet 785™ anti-human CD146, Brilliant Violet 711™ anti-human CD146, PE/Cyanine5 anti-human CD146, Biotin anti-human CD146, TotalSeq™-C0134 anti-human CD146, TotalSeq™-B0134 anti-human CD146 Antibody, APC/Cyanine7 anti-human CD146

Product Data



Human cervical cancer cell line HeLa was stained with CD146 (clone P1H12) Brilliant Violet 421™ (filled histogram) or mouse IgG1, κ Brilliant Violet 421™ isotype control (open histogram).

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