

# CD146 Monoclonal Antibody (P1H12), eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Dog, Human, Mouse, Rabbit
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	P1H12
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_1210462

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	-
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	-
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.25 µg/test	12 Publications
Immunoprecipitation (IP)	Assay-Dependent	-

## Product Specific Information

**Description:** The monoclonal antibody P1H12 recognizes CD146 also known as MUC18, s-endo, Endo-CAM and Mel-CAM, which is a member of the Ig superfamily of proteins. The expression of CD146 is found on endothelial cells, bone marrow fibroblasts and some tumors (especially melanoma). Recently mesenchymal stromal cells and endometrial stromal cells have also been shown to express CD146. The presence of CD146 on circulating blood cells have been confined to a subset of T cells rather than circulating endothelial cells, as expression of other endothelial markers (CD31 and CD51/61) is negative. Expression can be found on activated lymphocytes. The protein is heavily glycosylated with more than 50% of the mass from carbohydrates.

The antibody P1H12 has been reported to crossreact to mouse, rabbit, canine, but not rat.

**Applications Reported:** This P1H12 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, immunoblotting (WB) under nonreducing conditions, and immunohistology staining of frozen tissue sections.

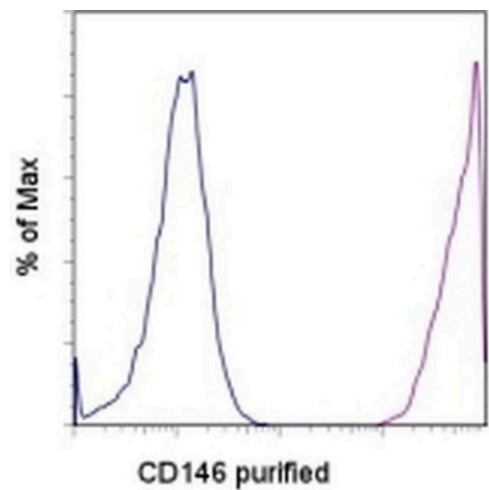
**Applications Tested:** This P1H12 antibody has been tested by flow cytometric analysis of HUVEC cell line. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

**Product Images For CD146 Monoclonal Antibody (P1H12), eBioscience™**



**CD146 Antibody (14-1469-82) in Flow**  
Staining of Human Umbilical Vein Endothelial Cells (HUVEC) with 0.125 µg of Mouse IgG1 K Isotype Control Purified (Product # 14-4714-82) (blue histogram) or 0.125 µg of Anti-CD146 Purified (purple histogram) followed by F (ab')<sub>2</sub> Anti-Mouse IgG PE (Product # 12-4012). Total viable cells were used for analysis.

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Immunohistochemistry (1)

<p>Oncology letters</p> <p><b>Targeting CD146 in combination with vorinostat for the treatment of ovarian cancer cells.</b></p> <p>"Published figure using CD146 monoclonal antibody (Product # 14-1469-82) in Immunohistochemistry"</p> <p>Authors: Ma X,Wang J,Liu J,Mo Q,Yan X,Ma D,Duan H</p>	<p>Year</p> <p>2017</p>
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Immunocytochemistry (1)

<p>The Journal of clinical investigation</p> <p><b>Resident fibroblast lineages mediate pressure overload-induced cardiac fibrosis.</b></p> <p>"14-1469 was used in Immunofluorescence to study the the origins of cardiac fibroblasts during development and in fibrosis."</p> <p>Authors: Moore-Morris T,Guimarães-Camboa N,Banerjee I,Zambon AC,Kisseleva T,Velayoudon A,Stallcup WB,Gu Y,Dalton ND,Cedenilla M,Gomez-Amaro R,Zhou B,Brenner DA,Peterson KL,Chen J,Evans SM</p>	<p>Year</p> <p>2014</p> <p>Species</p> <p>Mouse</p>
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Flow Cytometry (12)

<p>Frontiers in bioengineering and biotechnology</p> <p><b>Impact of Fibronectin Knockout on Proliferation and Differentiation of Human Infrapatellar Fat Pad-Derived Stem Cells.</b></p> <p>"Published figure using CD146 monoclonal antibody (Product # 14-1469-82) in Flow Cytometry"</p> <p>Authors: Wang Y,Fu Y,Yan Z,Zhang XB,Pei M</p>	<p>Year</p> <p>2022</p>
<p>Frontiers in cell and developmental biology</p> <p><b>Site-Dependent Lineage Preference of Adipose Stem Cells.</b></p> <p>"Published figure using CD146 monoclonal antibody (Product # 14-1469-82) in Flow Cytometry"</p> <p>Authors: Wang T,Hill RC,Dzieciatkowska M,Zhu L,Infante AM,Hu G,Hansen KC,Pei M</p>	<p>Year</p> <p>2022</p>

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