TECHNICAL DATA SHEET

CyFlow™ CD146 Purified
Anti-Hu/Ms; Clone P1H12

REF **AV721526**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD146
Alternative Names	MCAM, MUC18, Mel-CAM, s-endo
Clone	P1H12
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human | Mouse, Dog | Rabbit
Negative Species Reactivity	Rat
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Cultured human umbilical cells

Specificity

The mouse monoclonal antibody P1H12 recognizes CD146 antigen, a 118 kDa transmembrane glycoprotein expressed on epithelial and endothelial cells, fibroblasts, multipotent mesenchymal stromal cells, melanoma cells, activated T cells and activated keratinocytes.

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Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Western blot
- Immunohistochemistry
- Immunocytochemistry

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD146 (MCAM; melanoma cell adhesion molecule or MUC18) is a heavily glycosylated transmembrane glycoprotein with more than 50% of the mass from carbohydrates. It is expressed on epithelial and endothelial cells, fibroblasts, multipotent mesenchymal stromal cells, activated T cells and activated keratinocytes, and on some cancer cells, especially melanoma. The presence of CD146 on circulating blood cells has been confined to the activated T cells rather than circulating endothelial cells. CD146 mediates heterophilic cell adhesion and regulates monocyte transendothelial migration.

References

- Solovey A, Lin Y, Browne P, Choong S, Wayner E, Hebbel RP: Circulating activated endothelial cells in sickle cell anemia. N Engl J Med. 1997 Nov 27; 337(22):1584-90. < PMID: 9371854 >
- Solovey AN, Gui L, Chang L, Enenstein J, Browne PV, Hebbel RP: Identification and functional assessment of endothelial P1H12. J Lab Clin Med. 2001 Nov; 138(5):322-31. < PMID: 11709656 >
- Kamstock D, Guth A, Elmslie R, Kurzman I, Liggitt D, Coro L, Fairman J, Dow S: Liposome-DNA complexes infused intravenously inhibit tumor angiogenesis and elicit antitumor activity in dogs with soft tissue sarcoma. Cancer Gene Ther. 2006 Mar; 13(3):306-17. < PMID: 16138118 >

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• Finney MR, Greco NJ, Haynesworth SE, Martin JM, Hedrick DP, Swan JZ, Winter DG, Kadereit S, Joseph ME, Fu P, Pompili VJ, Laughlin MJ: Direct comparison of umbilical cord blood versus bone marrow-derived endothelial precursor cells in mediating neovascularization in response to vascularischemia. Biol Blood Marrow Transplant. 2006 May; 12(5):585-93. < PMID: 16635794 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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