

TECHNICAL DATA SHEET

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

REF BG312271

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	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human Mouse, Dog Rabbit
Negative Species Reactivity	Rat
Quantity	100 tests
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.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing 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 >
- 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

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

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.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com