

TECHNICAL DATA SHEET

CyFlow™ CD11c PE Anti-Hu; Clone BU15

REF AF853575

**For Research Use Only.
Not for use in diagnostic or therapeutic procedures.**

Specifications

Antigen	CD11c
Alternative Names	p150
Clone	BU15
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Dendritic cells of synovial fluid

Specificity

The mouse monoclonal antibody BU15 reacts with CD11c antigen, a 150 kDa integrin expressed mainly on dendritic cells and tissue macrophages.

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 20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (2 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

CD11c (αX integrin subunit) forms complex with CD18 (β2 integrin subunit) and is expressed mainly on tissue macrophages and dendritic cells. CD11c binds to complement fragment iC3b, fibrinogen, VCAM-1 and ICAM-2 or e.g. CD90. Like other β2 integrins, CD11c/CD18 plays roles in cell migration and phagocytosis. Moreover, interaction of CD11c/CD18 with plasminogen regulates plasmin activities, and interaction with heparin counteracts binding of iC3b.

References

- Hogg N, Takacs L, Palmer DG, Selvendran Y, Allen C: The p150,95 molecule is a marker of human mononuclear phagocytes: comparison with expression of class II molecules. Eur J Immunol. 1986 Mar; 16(3):240-8. < PMID: 3456894 >
- McMichael AJ, Beverley PCL, Cobbold S, et al. (Eds): Leucocyte Typing III, White Cell Differentiation Antigens. Oxford University Press, Oxford. 1987; 1-1050. < NLM ID: 8913266 >
- Doussis IA, Gatter KC, Mason DY: CD68 reactivity of non-macrophage derived tumours in cytological specimens. J Clin Pathol. 1993 Apr; 46(4):334-6. < PMID: 7684403 >
- Trowald-Wigh G, Johannisson A, Håkansson L: Canine neutrophil adhesion proteins and Fc-receptors in healthy dogs and dogs with adhesion protein deficiency, as studied by flow cytometry. Vet Immunol Immunopathol. 1993 Oct; 38(3-4):297-310. < PMID: 8291207 >

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

- Van der Vieren M, Le Trong H, Wood CL, Moore PF, St John T, Staunton DE, Gallatin WM: A novel leukointegrin, alpha d beta 2, binds preferentially to ICAM-3. *Immunity*. 1995 Dec; 3(6):683-90. < PMID: 8777714 >
- Kishimoto T, Goyert S, Kikutani H, Mason D, Miyasaka M, Moretta L, Ohno T, Okumura K, Shaw S, Springer TA, Sugamura K, Sugawara H, von dem Borne AEGK, Zola H (Eds): *Leucocyte Typing VI*. Garland Publishing Inc, New York. 1997; 1-1342. < NLM ID: 9712219 >
- Rezzonico R, Imbert V, Chicheportiche R, Dayer JM: Ligation of CD11b and CD11c beta(2) integrins by antibodies or soluble CD23 induces macrophage inflammatory protein 1alpha (MIP-1alpha) and MIP-1beta production in primary human monocytes through a pathway dependent on nuclear factor-kappaB. *Blood*. 2001 May 15; 97(10):2932-40. < PMID: 11342414 >
- Myou S, Zhu X, Boetticher E, Qin Y, Myo S, Meliton A, Lambertino A, Munoz NM, Hamann KJ, Leff AR: Regulation of adhesion of AML14.3D10 cells by surface clustering of beta2-integrin caused by ERK-independent activation of cPLA2. *Immunology*. 2002 Sep; 107(1):77-85. < PMID: 12225365 >
- Bullard DC, Hu X, Adams JE, Schoeb TR, Barnum SR: p150/95 (CD11c/CD18 expression is required for the development of experimental autoimmune encephalomyelitis. *Am J Pathol*. 2007 Jun; 170(6):2001-8. < PMID: 17525267 >
- Sadhu C, Ting HJ, Lipsky B, Hensley K, Garcia-Martinez LF, Simon SI, Staunton DE: CD11c/CD18: novel ligands and a role in delayed-type hypersensitivity. *J Leukoc Biol*. 2007 Jun; 81(6):1395-403. < PMID: 17389580 >
- Vorup-Jensen T, Chi L, Gjelstrup LC, Jensen UB, Jewett CA, Xie C, Shimaoka M, Linhardt RJ, Springer TA: Binding between the integrin alphaXbeta2 (CD11c/CD18 and heparin. *J Biol Chem*. 2007 Oct 19; 282(42):30869-77. < PMID: 17699512 >
- Gang J, Choi J, Lee JH, Nham SU: Identification of critical residues for plasminogen binding by the alphaXI-domain of the beta2 integrin, alphaXbeta2. *Mol Cells*. 2007 Oct 31; 24(2):240-6. < PMID: 17978577 >
- Angel CE, Lala A, Chen CJ, Edgar SG, Ostrovsky LL, Dunbar PR: CD14+ antigen-presenting cells in human dermis are less mature than their CD1a+ counterparts. *Int Immunol*. 2007 Nov; 19(11):1271-9. < PMID: 17804688 >
- Sadhu C, Hendrickson L, Dick KO, Potter TG, Staunton DE: Novel Tools for Functional Analysis of CD11c: Activation-Specific, Activation-Independent, and Activating Antibodies. *J Immunoassay Immunochem*. 2008; 29(1):42-57. < PMID: 18080879 >

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

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