

TECHNICAL DATA SHEET

CyFlow™ CD11c Purified Anti-Hu; Clone BU15

REF CF757356

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

Specifications

Antigen	CD11c
Alternative Names	p150
Clone	BU15
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
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

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

- Flow cytometry
- Immunoprecipitation
- Immunohistochemistry (frozen sections)

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH $\approx$ 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 (α X integrin subunit) forms complex with CD18 (β 2 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 β 2 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, Cebbold 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