

TECHNICAL DATA SHEET

CyFlow™ CD36 Purified Anti-Hu; Clone CB38 (NL07)

REF CH075839

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD36
Alternative Names	GPIV, GP3B
Clone	CB38 (NL07)
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgM
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Living human myeloid cells

Specificity

The mouse monoclonal antibody CB38 (NL07) recognizes CD36 antigen, a 85-113 kDa integral membrane glycoprotein expressed on platelets, macrophages, endothelial cells, early erythroid cells and megakaryocytes.

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

Storage Buffer

The reagent is provided in Tris buffered saline (TBS) solution, pH $\approx$ 8.0, 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

CD36 (FAT; fatty acid translocase) is an 85-113 kDa ditopic glycosylated protein that belongs to the class B family of scavenger receptors. CD36 is expressed by most resting marginal zone B cells but not by follicular and B1 B cells, and it is rapidly induced on Follicular B cells in vitro upon TLR and CD40 stimulation. CD36 does not affect the development of B cells, but modulates both primary and secondary antibody response. Similarly to glucose transporter GLUT4, CD36 is translocated from intracellular pools to the plasma membrane following cell stimulation by insulin. In mouse, CD36 is responsible for gustatory perception of long-chain fatty acids.

References

- Knapp W, Dorken B, Gilks W, Rieber EP, Schmidt RE, Stein H, von dem Borne AEGK (Eds): Leucocyte Typing IV. Oxford University Press, Oxford. 1989; 1-1820. < NLM ID: 8914679 >
- Alessio M, Roggero S, Bussolino F, Saitta M, Malavasi F: Characterization of the murine monoclonal antibody NL07 specific for the human thrombospondin receptor (CD36 molecule). Curr Stud Hematol Blood Transfus. 1991; 58:182-6. < PMID: 1720081 >
- Alessio M, Ghigo D, Garbarino G, Geuna M, Malavasi F: Analysis of the human CD36 leucocyte differentiation antigen by means of the monoclonal antibody NL07. Cell Immunol. 1991 Oct 15; 137(2):487-500. < PMID: 1716523 >

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

- Alessio M, Greco NJ, Primo L, Ghigo D, Bosia A, Tandon NN, Ockenhouse CF, Jamieson GA, Malavasi F: Platelet activation and inhibition of malarial cytoadherence by the anti-CD36 IgM monoclonal antibody NL07. *Blood*. 1993 Dec 15; 82(12):3637-47. < PMID: 7505121 >
- Fadok VA, Warner ML, Bratton DL, Henson PM: CD36 is required for phagocytosis of apoptotic cells by human macrophages that use either a phosphatidylserine receptor or the vitronectin receptor (alpha v beta 3). *J Immunol*. 1998 Dec 1; 161(11):6250-7. < PMID: 9834113 >
- Matasić R, Dietz AB, Vuk-Pavlović S: Dexamethasone inhibits dendritic cell maturation by redirecting differentiation of a subset of cells. *J Leukoc Biol*. 1999 Dec; 66(6):909-14. < PMID: 10614771 >
- Kapinsky M, Torzewski M, Büchler C, Duong CQ, Rothe G, Schmitz G: Enzymatically degraded LDL preferentially binds to CD14(high) CD16(+) monocytes and induces foam cell formation mediated only in part by the class B scavenger-receptor CD36. *Arterioscler Thromb Vasc Biol*. 2001 Jun; 21(6):1004-10. < PMID: 11397711 >
- McKenna RW, Washington LT, Aquino DB, Picker LJ, Kroft SH: Immunophenotypic analysis of hematogones (B-lymphocyte precursors) in 662 consecutive bone marrow specimens by 4-color flow cytometry. *Blood*. 2001 Oct 15; 98(8):2498-507. < PMID: 11588048 >
- Hoffmann PR, deCathelineau AM, Ogden CA, Leverrier Y, Bratton DL, Daleke DL, Ridley AJ, Fadok VA, Henson PM: Phosphatidylserine (PS) induces PS receptor-mediated macropinocytosis and promotes clearance of apoptotic cells. *J Cell Biol*. 2001 Nov 12; 155(4):649-59. < PMID: 11706053 >
- Moniuszko M, Kowal K, Rusak M, Pietruczuk M, Dabrowska M, Bodzenta-Lukaszyk A: Monocyte CD163 and CD36 expression in human whole blood and isolated mononuclear cell samples: influence of different anticoagulants. *Clin Vaccine Immunol*. 2006 Jun; 13(6):704-7. < PMID: 16760331 >

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