

TECHNICAL DATA SHEET

CyFlow™ CD36 PE Anti-Hu; Clone TR9

REF CN163880

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD36
Alternative Names	GPIV, GP3B
Clone	TR9
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Platelets

Specificity

The mouse monoclonal antibody TR9 recognizes CD36 antigen, a 85 kDa integral membrane glycoprotein expressed on platelets, macrophages, endothelial cells, early erythroid cells and

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

megakaryocytes. The antibody TR9 cross-blocks binding of FITC-labeled standard antibody OKM5. Anti-CD36 antibodies inhibit adhesive functions (e.g. adherence of infected erythrocytes to target cells).

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

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

- van Oort MM, van Doorn JM, Bonen A, Glatz JF, van der Horst DJ, Rodenburg KW, Luiken JJ: Insulin-induced translocation of CD36 to the plasma membrane is reversible and shows similarity to that of GLUT4. *Biochim Biophys Acta*. 2008 Jan-Feb; 1781(1-2):61-71. < PMID: 18167317 >
- Won WJ, Bachmann MF, Kearney JF: CD36 Is Differentially Expressed on B Cell Subsets during Development and in Responses to Antigen. *J Immunol*. 2008 Jan 1; 180(1):230-7. < PMID: 18097024 >

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

- Gaillard D, Laugerette F, Darcel N, El-Yassimi A, Passilly-Degrace P, Hichami A, Akhtar Khan N, Montmayeur JP, Besnard P: The gustatory pathway is involved in CD36-mediated orosensory perception of long-chain fatty acids in the mouse. FASEB J. 2008 May; 22(5):145-68. < PMID: 18162488 >

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