

TECHNICAL DATA SHEET

CyFlow™ CD56 Biotin **Anti-Hu; Clone MEM-188**

REF CP079605

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

Specifications

Antigen	CD56
Alternative Names	NCAM
Clone	MEM-188
Clonality	monoclonal
Format	Biotin
Host / Isotype	Mouse / IgG2a
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	KG-1 human acute myelogenous leukemia cell line

Specificity

The mouse monoclonal antibody MEM-188 recognizes a 180 kDa isoform of CD56 antigen expressed in leukocytes. It has been suggested that the antibody MEM-188 could react with rhesus monkey lymphocytes. Reactivity with other NCAM isoforms has not been tested.

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 indirect immunofluorescence analysis by Flow Cytometry. Suggested working usage is 5 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in 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

CD56 (NCAM; neural cell adhesion molecule) is a transmembrane glycoprotein of immunoglobulin family serving as adhesive molecule which is ubiquitously expressed in nervous system, usually as 120 kDa, 140 kDa or 180 kDa isoform, and it is also found on T cells and NK cells. Polysialic modification results in reduction of CD56-mediated cell adhesion and is involved in cell migration, axonal growth, pathfinding and synaptic plasticity. CD56 is a widely used neuroendocrine marker with a high sensitivity for neuroendocrine tumours and ovarian granulosa cell tumors.

References

- Lanier LL, Chang C, Azuma M, Ruitenberg JJ, Hemperly JJ, Phillips JH: Molecular and functional analysis of human natural killer cell-associated neural cell adhesion molecule (N-CAM/CD56). J Immunol. 1991 Jun 15; 146(12):4421-6. < PMID: 1710251 >
- 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 >
- Brdicka T, Imrich M, Angelisová P, Brdicková N, Horváth O, Spicka J, Hilgert I, Lusková P, Dráber P, Novák P, Engels N, Wienands J, Simeoni L, Osterreicher J, Aguado E, Malissen M, Schraven B, Horejsí

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

- V: Non-T cell activation linker (NTAL): a transmembrane adaptor protein involved in immunoreceptor signaling. *J Exp Med*. 2002 Dec 16; 196(12):1617-26. < PMID: 12486104 >
- Mason D, Simmons D, Buckley C, Schwartz-Albiez R, Hadam M, Saalmuller A, Clark E, Malavasi F, Morrissey JA (Eds): *Leucocyte Typing VII*. Oxford University Press. 2002; 1-945. < NLM ID: 101177131 >
 - Brdicková N, Brdicka T, Angelisová P, Horváth O, Spicka J, Hilgert I, Paces J, Simeoni L, Kliche S, Merten C, Schraven B, Horejsí V: LIME: a new membrane Raft-associated adaptor protein involved in CD4 and CD8 coreceptor signaling. *J Exp Med*. 2003 Nov 17; 198(10):1453-62. < PMID: 14610046 >
 - Lin CW, Liu TY, Chen SU, Wang KT, Medeiros LJ, Hsu SM: CD94 1A transcripts characterize lymphoblastic lymphoma/leukemia of immature natural killer cell origin with distinct clinical features. *Blood*. 2005 Nov 15; 106(10):3567-74. < PMID: 16046525 >
 - Drbal K, Moertelmaier M, Holzhauser C, Muhammad A, Fuerthbauer E, Howorka S, Hinterberger M, Stockinger H, Schütz GJ: Single-molecule microscopy reveals heterogeneous dynamics of lipid raft components upon TCR engagement. *Int Immunol*. 2007 May; 19(5):675-84. < PMID: 17446208 >
 - Yates J, Rovis F, Mitchell P, Afzali B, Tsang JY, Garin M, Lechler RI, Lombardi G, Garden OA: The maintenance of human CD4+ CD25+ regulatory T cell function: IL-2, IL-4, IL-7 and IL-15 preserve optimal suppressive potency in vitro. *Int Immunol*. 2007 Jun; 19(6):785-99. < PMID: 17545278 >
 - McCluggage WG, McKenna M, McBride HA: CD56 is a sensitive and diagnostically useful immunohistochemical marker of ovarian sex cord-stromal tumors. *Int J Gynecol Pathol*. 2007 Jul; 26(3):322-7. < PMID: 17581419 >
 - Ohishi Y, Kaku T, Oya M, Kobayashi H, Wake N, Tsuneyoshi M: CD56 expression in ovarian granulosa cell tumors, and its diagnostic utility and pitfalls. *Gynecol Oncol*. 2007 Oct; 107(1):30-8. < PMID: 17583777 >
 - Jakovcevski I, Mo Z, Zecevic N: Down-regulation of the axonal polysialic acid-neural cell adhesion molecule expression coincides with the onset of myelination in the human fetal forebrain. *Neuroscience*. 2007 Oct 26; 149(2):328-37. < PMID: 17900814 >
 - Olsen I, Tollefsen S, Aagaard C, Reitan LJ, Bannantine JP, Andersen P, Sollid LM, Lundin KE: Isolation of *Mycobacterium avium* subspecies paratuberculosis reactive CD4 T cells from intestinal biopsies of Crohn's disease patients. *PLoS One*. 2009 May 22; 4(5):e5641. < PMID: 19479064 >
 - Hovden AO, Karlsen M, Jonsson R, Aarstad HJ, Appel S: Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses. *BMC Immunol*. 2011 Jan 5; 12:2. < PMID: 21208424 >

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