EXBIO Antibodies

PRODUCT DATA SHEET

PB-231-T025

Monoclonal Antibody to CD56 Pacific Blue™ conjugated (25 tests)

Clone: MEM-188

Isotype: Mouse IgG2a

Specificity: The antibody MEM-188 reacts with a 180 kDa isoform of CD56 (NCAM) 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.
HLDA VI; WS code A055
HLDA VI; WS Code NK26
HLDA VII; WS code 70077

Immunogen: KG-1 human acute myelogenous leukemia cell line

Species Reactivity: Human, Non-Human Primates

Preparation: The purified antibody is conjugated with Pacific Blue™ under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.
Do not use after expiration date stamped on vial label.
Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension.
The content of a vial (0.1 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: 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 tumours.

For laboratory research only, not for drug, diagnostic or other use.

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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.
*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.
*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.
*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.
*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
*Leukocyte Typing VII., Mason D. et al. (Eds.), Oxford University Press (2002).
*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.
*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.
*Drbal K, Moertelmaier M, Holzhauser C, Muhammad A, Fuertbauer 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.
*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 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.
*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.
*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.
*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.

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