



T4-208-T100

Monoclonal Antibody to CD9 APC-Cy™7 conjugated (100 tests)

Clone:	MEM-61
Isotype:	Mouse IgG1
Specificity:	The antibody MEM-61 recognizes an epitope on second extracellular domain (EC2) of CD9 antigen, a 24 kDa transmembrane protein expressed on platelets, monocytes, pre-B lymphocytes, granulocytes and activated T lymphocytes. HLDA VI; WS Code P P-15
Regulatory Status:	RUO
Immunogen:	Pre-B cell line NALM-6.
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with tandem dye APC-Cy™7 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 stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
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.
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 (0.4 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD9 belongs to proteins of tetraspanin family that orchestrate cholesterol-associated tetraspanin-enriched signaling microdomains within the plasma membrane, forming complexes with each other as well as with integrins, membrane-anchored growth factors and other proteins. CD9 is involved in cell motility, osteoclastogenesis, neurite outgrowth, myotube formation, and sperm-egg fusion, plays roles in cell attachment and proliferation and is necessary for association of heterologous MHC II molecules on the dendritic cell plasma membrane which is important for effective T cell stimulation. CD9 is also considered as metastasis suppressor in solid tumors.

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

**Antibodies****References:**

- *Saito Y, Tachibana I, Takeda Y, Yamane H, He P, Suzuki M, Minami S, Kijima T, Yoshida M, Kumagai T, Osaki T, Kawase I. Absence of CD9 enhances adhesion-dependent morphologic differentiation, survival, and matrix metalloproteinase-2 production in small cell lung cancer cells. *Cancer Res.* 2006 Oct 1;66(19):9557-65.
- *Israels SJ, McMillan-Ward EM: Platelet tetraspanin complexes and their association with lipid rafts. *Thromb Haemost.* 2007 Nov;98(5):1081-7.
- *Kim YJ, Yu JM, Joo HJ, Kim HK, Cho HH, Bae YC, Jung JS: Role of CD9 in proliferation and proangiogenic action of human adipose-derived mesenchymal stem cells. *Pflugers Arch.* 2007 Nov;455(2):283-96.
- *Unternaehrer JJ, Chow A, Pypaert M, Inaba K, Mellman I: The tetraspanin CD9 mediates lateral association of MHC class II molecules on the dendritic cell surface. *Proc Natl Acad Sci U S A.* 2007 Jan 2;104(1):234-9.
- *Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- *Lafleur MA, Xu D, Hemler ME: Tetraspanin proteins regulate membrane type-1 matrix metalloproteinase-dependent pericellular proteolysis. *Mol Biol Cell.* 2009 Apr;20(7):2030-40.
- *Singh AB, Sugimoto K, Dhawan P, Harris RC: Juxtacrine activation of EGFR regulates claudin expression and increases transepithelial resistance. *Am J Physiol Cell Physiol.* 2007 Nov;293(5):C1660-8.
- *Stöckl J, Majdic O, Fischer G, Maurer D, Knapp W: Monomorphic molecules function as additional recognition structures on haptenated target cells for HLA-A1-restricted, hapten-specific CTL. *J Immunol.* 2001 Sep 1;167(5):2724-33.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

Cy™ and CyDye™ are registered trademarks of GE Healthcare.

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

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz