

## Monoclonal Antibody to CD9 - FITC

<b>Alternate names:</b>	5H9 antigen, Cell growth-inhibiting gene 2 protein, GIG2, Leukocyte antigen MIC3, MIC3, Motility-related protein, TSPAN29, Tetraspanin-29, p24
<b>Catalog No.:</b>	SM3039F
<b>Quantity:</b>	100 Tests
<b>Background:</b>	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.
<b>Uniprot ID:</b>	<a href="#">P21926</a>
<b>NCBI:</b>	<a href="#">NP_001760.1</a>
<b>GeneID:</b>	<a href="#">928</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Clone:</b>	MEM-61
<b>Immunogen:</b>	Pre-B cell line NALM-6
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Buffer System:</b> 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. <b>Label:</b> FITC – Conjugated with Fluorescein isothiocyanate under optimum conditions. The reagent is free of unconjugated and adjusted for direct use
<b>Applications:</b>	Flow Cytometry analysis of human blood cells using 20 $\mu$ l reagent / 100 $\mu$ l whole blood or 10e6 cells in a suspension. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	The antibody recognizes an epitope on second extracellular domain (EC2) of CD9 antigen, a 24 kDa single transmembrane polypeptide expressed on platelets, monocytes, pre-B lymphocytes, granulocytes and activated T lymphocytes. <b>Species:</b> Human. Other species not tested.
<b>Storage:</b>	Store the antibody at 2 - 8 °C. DO NOT FREEZE! This product is photosensitive and should be protected from light. Shelf life: one year from despatch.

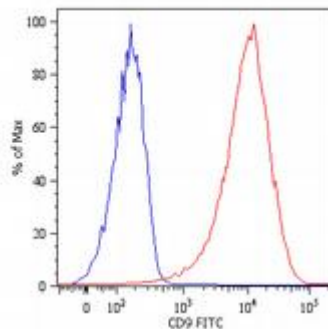
**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)

- General References:**
1. 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.
  2. Israels SJ, McMillan-Ward EM: Platelet tetraspanin complexes and their association with lipid rafts. *Thromb Haemost.* 2007 Nov;98(5):1081-7.
  3. 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.
  4. 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.
  5. Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
  5. 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.
  6. 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.
  7. 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.

**Pictures:**



Surface staining of NALM-6 human pre-B cell leukemia cell line with anti-human CD9 (MEM-61) FITC. Total viable cells were used for analysis.

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)