

## Datasheet

### CD9 monoclonal antibody, clone MEM-61 (FITC)

**Catalog Number:** MAB4566

**Regulation Status:** For research use only (RUO)

**Product Description:** Mouse monoclonal antibody raised against native CD9.

**Clone Name:** MEM-61

**Immunogen:** Native purified CD9 from Pre-B cell line NALM-6.

**Host:** Mouse

**Theoretical MW (kDa):** 24

**Reactivity:** Human

**Applications:** Flow Cyt

(See our web site product page for detailed applications information)

**Protocols:** See our web site at

<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Specificity:** This antibody 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.

**Form:** Liquid

**Conjugation:** FITC

**Isotype:** IgG1

**Recommend Usage:** Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or  $10^6$  cells in a suspension)

The optimal working dilution should be determined by the end user.

**Storage Buffer:** In PBS (0.2% BSA, 15 mM sodium azide)

**Storage Instruction:** Store in the dark at 4°C. Do not freeze.

Avoid prolonged exposure to light.

Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 928

**Gene Symbol:** CD9

**Gene Alias:** 5H9, BA2, BTCC-1, DRAP-27, GIG2, MIC3, MRP-1, P24, TSPAN29

**Gene Summary:** The protein encoded by this gene is a member of the transmembrane 4 superfamily, also known as the tetraspanin family. Most of these members are cell-surface proteins that are characterized by the presence of four hydrophobic domains. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. This encoded protein is a cell surface glycoprotein that is known to complex with integrins and other transmembrane 4 superfamily proteins. It can modulate cell adhesion and migration and also trigger platelet activation and aggregation. In addition, the protein appears to promote muscle cell fusion and support myotube maintenance. [provided by RefSeq]

#### References:

1. Platelet tetraspanin complexes and their association with lipid rafts. Israels SJ, McMillan-Ward EM. *Thromb Haemost.* 2007 Nov;98(5):1081-7.
2. Role of CD9 in proliferation and proangiogenic action of human adipose-derived mesenchymal stem cells. Kim YJ, Yu JM, Joo HJ, Kim HK, Cho HH, Bae YC, Jung JS. *Pflugers Arch.* 2007 Nov;455(2):283-96. Epub 2007 Aug 1.
3. The tetraspanin CD9 mediates lateral association of MHC class II molecules on the dendritic cell surface. Unternaehrer JJ, Chow A, Pypaert M, Inaba K, Mellman I. *Proc Natl Acad Sci U S A.* 2007 Jan 2;104(1):234-9. Epub 2006 Dec 26.