

**CD9 Antibody (clone HI9a)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS12028****Specification**

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**CD9 Antibody (clone HI9a) - Product Information**

Application	IHC
Primary Accession	<a href="#">P21926</a>
Reactivity	Human, Rabbit, Sheep, Horse, Bovine, Dog
Host	Mouse
Clonality	Monoclonal
Calculated MW	25kDa KDa

**CD9 Antibody (clone HI9a) - Additional Information****Gene ID** 928**Other Names**

CD9 antigen, 5H9 antigen, Cell growth-inhibiting gene 2 protein, Leukocyte antigen MIC3, Motility-related protein, MRP-1, Tetraspanin-29, Tspan-29, p24, CD9, CD9, MIC3, TSPAN29

**Reconstitution & Storage**

Store undiluted at 4 degrees C

**Precautions**

CD9 Antibody (clone HI9a) is for research use only and not for use in diagnostic or therapeutic procedures.

**CD9 Antibody (clone HI9a) - Protein Information****Name** CD9 {ECO:0000303|PubMed:1840589, ECO:0000312|HGNC:HGNC:1709}**Function**

Integral membrane protein associated with integrins, which regulates different processes, such as sperm-egg fusion, platelet activation and aggregation, and cell adhesion (PubMed:<a href="http://www.uniprot.org/citations/8478605" target="\_blank">8478605</a>, PubMed:<a href="http://www.uniprot.org/citations/14575715" target="\_blank">14575715</a>, PubMed:<a href="http://www.uniprot.org/citations/18541721" target="\_blank">18541721</a>). Present at the cell surface of oocytes and plays a key role in sperm-egg fusion, possibly by organizing multiprotein complexes and the morphology of the membrane required for the fusion (By similarity). In myoblasts, associates with CD81 and PTGFRN and inhibits myotube fusion during muscle regeneration (By similarity). In macrophages, associates with CD81 and beta-1 and beta-2 integrins, and prevents macrophage fusion into multinucleated giant cells specialized in ingesting complement-opsonized large particles (PubMed:<a href="http://www.uniprot.org/citations/12796480" target="\_blank">12796480</a>). Also prevents the fusion between mononuclear cell progenitors into osteoclasts in charge of bone resorption (By similarity). Acts as a receptor for PSG17 (By similarity). Involved in platelet activation and aggregation (PubMed:<a href="http://www.uniprot.org/citations/18541721" target="\_blank">18541721</a>).

target="\_blank">18541721</a>). Regulates paranodal junction formation (By similarity). Involved in cell adhesion, cell motility and tumor metastasis (PubMed:<a href="http://www.uniprot.org/citations/8478605" target="\_blank">8478605</a>, PubMed:<a href="http://www.uniprot.org/citations/7511626" target="\_blank">7511626</a>).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Membrane; Multi-pass membrane protein. Secreted, extracellular exosome {ECO:0000250|UniProtKB:P40240}. Note=Present at the cell surface of oocytes. Accumulates in the adhesion area between the sperm and egg following interaction between IZUMO1 and its receptor IZUMO1R/JUNO {ECO:0000250|UniProtKB:P40240}

#### **Tissue Location**

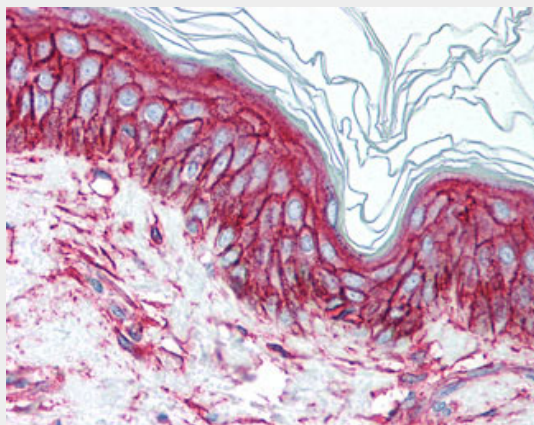
Detected in platelets (at protein level) (PubMed:19640571). Expressed by a variety of hematopoietic and epithelial cells (PubMed:19640571).

### **CD9 Antibody (clone HI9a) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **CD9 Antibody (clone HI9a) - Images**



Anti-CD9 antibody IHC of human skin.

### **CD9 Antibody (clone HI9a) - Background**

Involved in platelet activation and aggregation. Regulates paranodal junction formation. Involved in cell adhesion, cell motility and tumor metastasis. Required for sperm-egg fusion.

### **CD9 Antibody (clone HI9a) - References**

Boucheix C., et al.J. Biol. Chem. 266:117-122(1991).  
Lanza F., et al.J. Biol. Chem. 266:10638-10645(1991).

Miyake M.,et al.J. Exp. Med. 174:1347-1354(1991).  
Rubinstein E.,et al.Genomics 16:132-138(1993).  
Kobayashi H.,et al.Clin. Exp. Immunol. 137:101-108(2004).