10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-human CD9 antibody

Purified Mouse Monoclonal Antibody
Catalog # ABV11679

Specification

Anti-human CD9 antibody - Product Information

Application	**E, WB, FC**
Primary Accession	P21926
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**25416**

Anti-human CD9 antibody - 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

Target/Specificity
CD9 (unconjugated)

Formulation
1 mg/ml in phosphate buffered saline (PBS) with sodium azide (15 mM), Approx. pH: 7.4.

Handling
The antibody solution should be gently mixed before use

Background Descriptions

Precautions
Anti-human CD9 antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-human CD9 antibody - 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:8478605, PubMed:14575715, PubMed:18541721). 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:12796480). 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:18541721). Regulates paranodal junction formation (By similarity). Involved in cell adhesion, cell motility and tumor metastasis (PubMed:8478605, PubMed:7511626).

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}

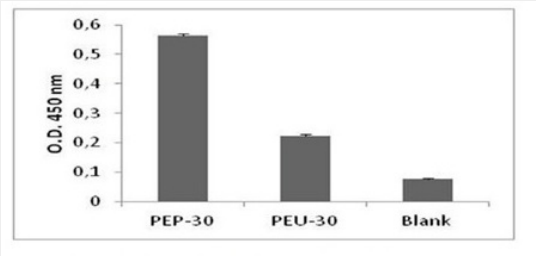
Tissue Location
Detected in platelets (at protein level) (PubMed:19640571). Expressed by a variety of hematopoietic and epithelial cells (PubMed:19640571).

Anti-human CD9 antibody - Protocols

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

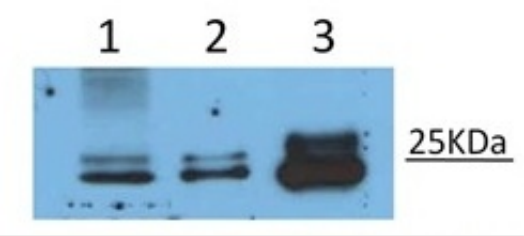
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-human CD9 antibody - Images

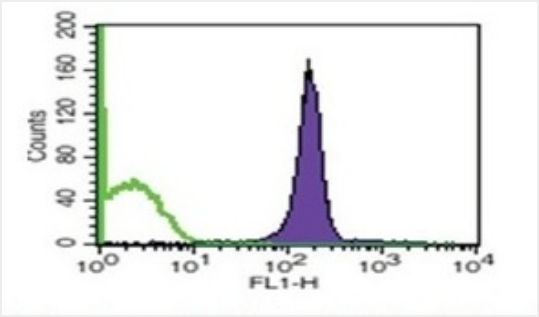


CD9 detection in purified exosomed from human plasma(PEP) and urine(PEU), 30ug.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Detection of CD9 by Western blot. 1.MM1(melanoma cell) lysate (20ug). 2. Purified exosomes from MM1 cells (20ug). 3. Plasma healthy donors purified exosomes (20ug).



CD9 staining of human plasma purified exosomes.

Anti-human CD9 antibody - Background

Anti-CD9 recognizes a human 24-kiloDalton (kDa) single-chain cell-surface glycoprotein (p24) belonging to the tetraspanin family which transverse the membrane four times. The CD9 antigen has a very broad tissue distribution. It is present on basophils, eosinophils, monocytes, pre-B cells, B cells, and various leukemic cell lines (erythroid, myeloid, some T-lymphoid, pre–B-lymphoid). It is also found on follicular center cells, sinus histocytes, macrophages, Kupffer cells, osteoclasts, hepatocytes, bile duct endothelium, renal glomeruli, proximal and distal tubuli, epithelia (intercellular spinous spaces) of skin and mucosa, fibroblasts, connective tissue, endothelium, smooth muscle, cardiac muscle, synovial lining cells, brain white matter, peripheral nerves and human keratin. In addition to being a co-stimulatory molecule, CD9 antigen activates platelets and induces mitogenesis and kinase activity and is involved in cell migration, cell adhesion, and integrin signaling.