10320 Camino Santa Fe, Suite G
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Anti-CD9 Rabbit Monoclonal Antibody

Catalog # ABO13238

Specification

Anti-CD9 Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC, IP, FC**
Primary Accession	P21926
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-CD9 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-CD9 Rabbit Monoclonal Antibody - Additional Information

Gene ID 928

Other Names
CD9 antigen, 5H9 antigen, Cell growth-inhibiting gene 2 protein {ECO:0000303|Ref.6}, Leukocyte antigen MIC3, Motility-related protein, MRP-1, Tetraspanin-29, Tspan-29, p24, CD9, CD9 {ECO:0000303|PubMed:1840589, ECO:0000312|HGNC:HGNC:1709}

Calculated MW
25416 MW KDa

Application Details
WB 1:1000-1:5000
IHC 1:100-1:500
ICC/IF 1:50-1:200
IP 1:50
FC 1:50

Subcellular Localization
Membrane ; Multi-pass membrane protein. Cell membrane ; Multi-pass membrane protein.

Tissue Specificity
Detected in platelets (at protein level). Expressed by a variety of hematopoietic and epithelial cells..

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human CD9

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term**

storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-CD9 Rabbit Monoclonal 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:14575715, PubMed:18541721, PubMed:8478605). 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:7511626, PubMed:8478605).

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-CD9 Rabbit Monoclonal 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-CD9 Rabbit Monoclonal Antibody - Images

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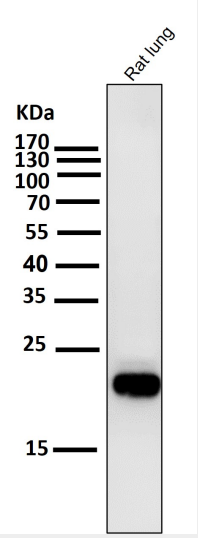
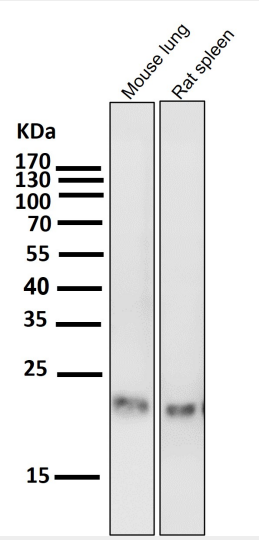
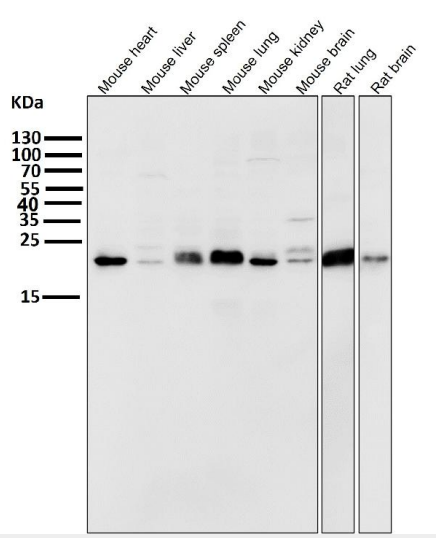


All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.

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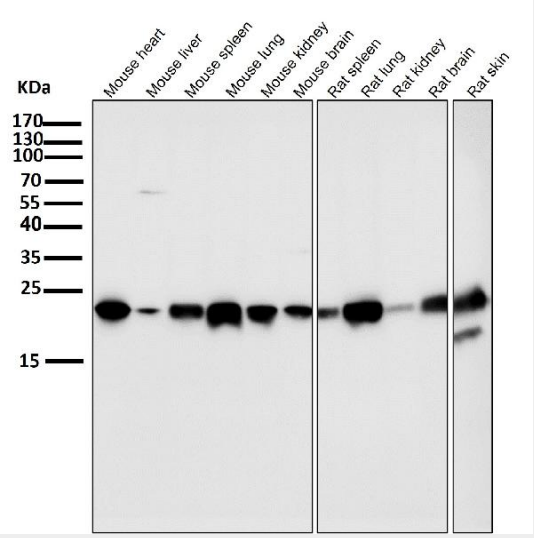
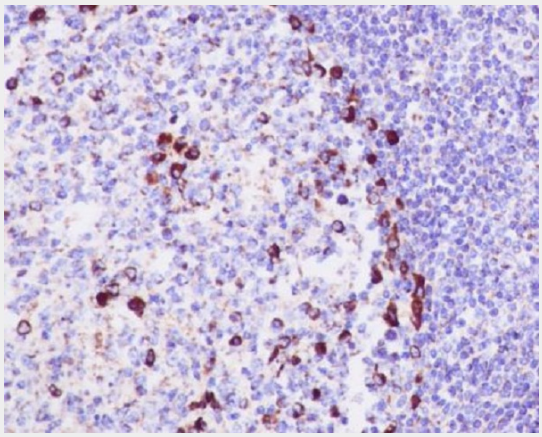
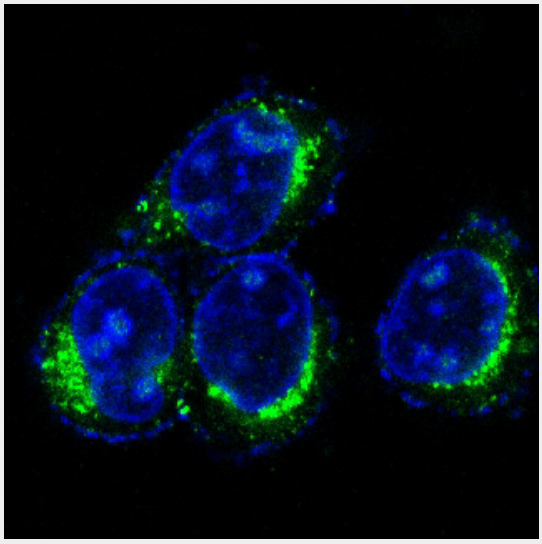


All lanes use the Antibody at 1:4K dilution for 1 hour at room temperature.



Immunohistochemical analysis of paraffin-embedded human tonsil, using CD9 Antibody.



Immunofluorescent analysis of Hela cells, using CD9 Antibody .

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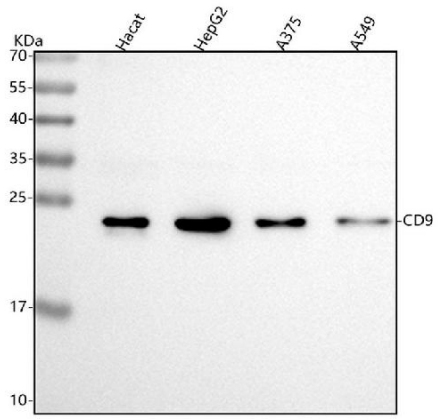

Figure 1. Western blot analysis of CD9 using anti-CD9 antibody (M01202).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hacat whole cell lysates,
Lane 2: human HepG2 whole cell lysates,
Lane 3: human A375 whole cell lysates,
Lane 4: human A549 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD9 antigen affinity purified monoclonal antibody (Catalog # M01202) at 1:100 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD9 at approximately 25 kDa. The expected band size for CD9 is at 25 kDa.