

CD9 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1482D

Specification

CD9 Antibody (Center) - Product Information

Application	WB, IHC-P, IF,E
Primary Accession	P21926
Reactivity	Human, Rat
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	115-145

CD9 Antibody (Center) - 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

This CD9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 115-145 amino acids from the Central region of human CD9.

Dilution

WB~~1:1000

IHC-P~~1:100

IF~~1:25

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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

CD9 Antibody (Center) - 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

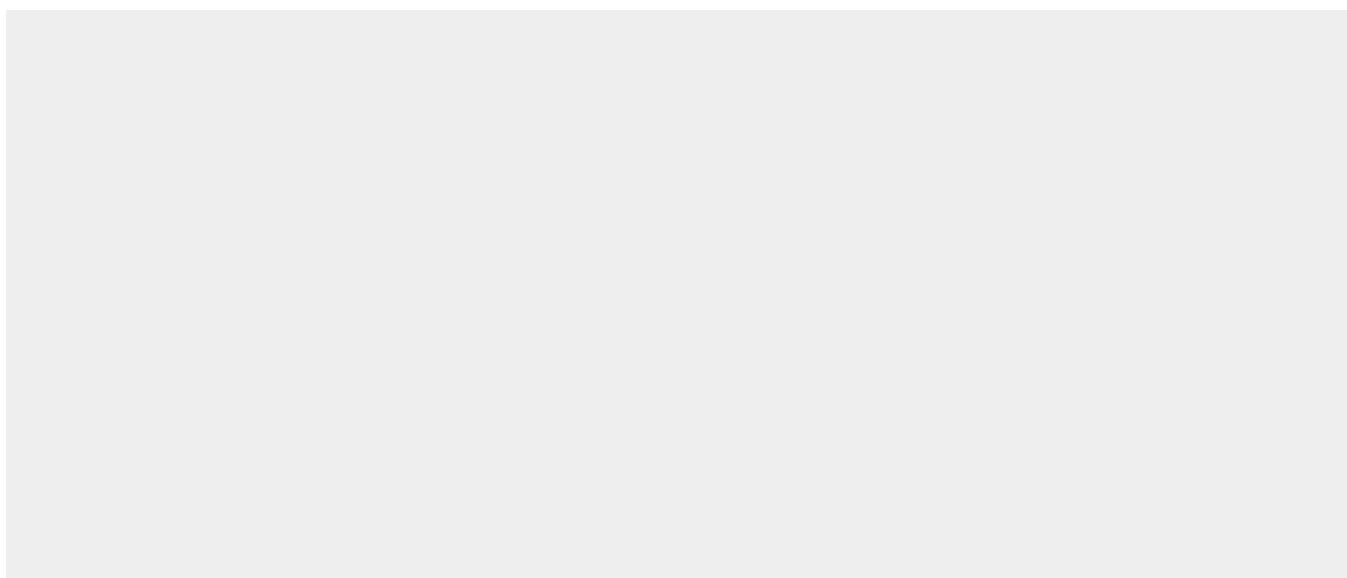
Detected in platelets (at protein level) (PubMed:19640571). Expressed by a variety of hematopoietic and epithelial cells (PubMed:19640571).

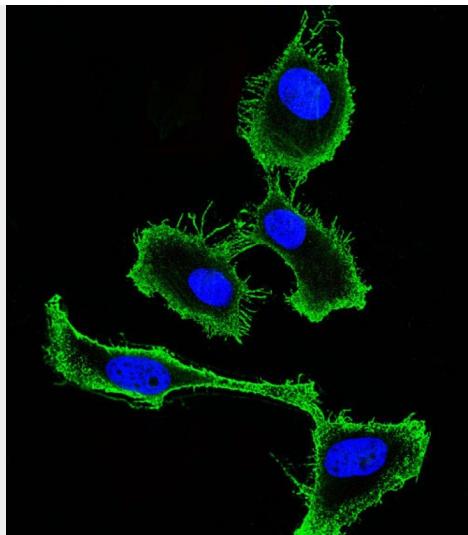
CD9 Antibody (Center) - Protocols

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

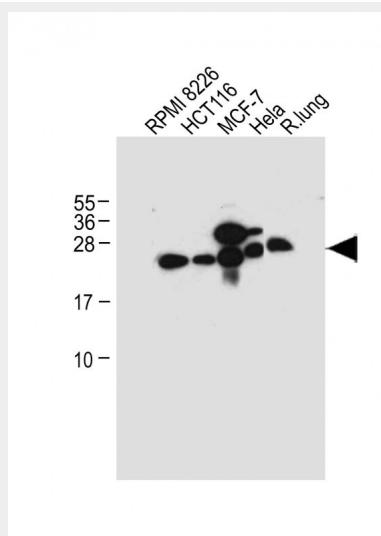
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD9 Antibody (Center) - Images

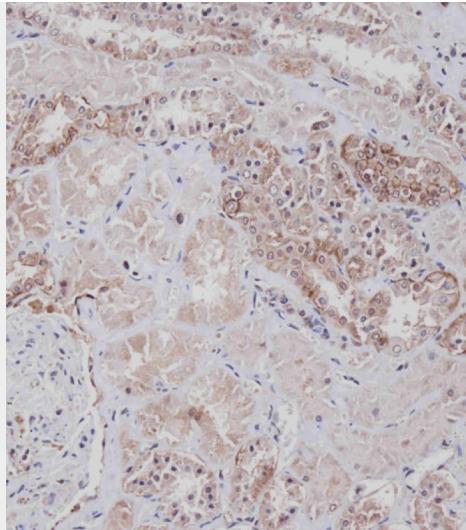




Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human Cervical epithelial adenocarcinoma cell line) cells labeling CD9 with AP1482d at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing membrane staining on HeLa cell line. The nuclear counter stain is DAPI (blue).



All lanes : Anti-CD9 Antibody (Center) at 1:1000 dilution Lane 1: RPMI 8226 whole cell lysate Lane 2: HCT116 whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: HeLa whole cell lysate Lane 5: Rat lung tissue lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of AP1482D on paraffin-embedded Human kidney tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

CD9 Antibody (Center) - Background

CD9 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 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.

CD9 Antibody (Center) - References

Ovalle,S., Int. J. Cancer 121 (10), 2140-2152 (2007)
Kovalenko,O.V., Mol. Cell Proteomics 6 (11), 1855-1867 (2007)
Abache,T., J. Cell. Biochem. 102 (3), 650-664 (2007)
Horejsi,V., FEBS Lett. 288 (1-2), 1-4 (1991)

CD9 Antibody (Center) - Citations

- [Diagnostic and prognostic relevance of circulating exosomal miR-373, miR-200a, miR-200b and miR-200c in patients with epithelial ovarian cancer.](#)