



Anti-Human CD9 Antibody, Clone HI9a

Antibodies

Mouse monoclonal IgG1 antibody
against human, rhesus, cynomolgus
CD9, unconjugated

Catalog #100-0138

100 µg 0.5 mg/mL

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Product Description

The HI9a antibody reacts with an extracellular epitope on human CD9, a 24 kDa single-chain type III transmembrane glycoprotein. CD9 belongs to the tetraspanin family of proteins, which contain four transmembrane domains, two extracellular loops, and short cytoplasmic N- and C-termini. CD9 is broadly expressed, including on the surface of monocytes, developing B cells, activated T cells, granulocytes, epithelial cells, endothelial cells, and platelets (mainly the α -granules). CD9 is also a marker characteristic of extracellular vesicles (EVs). It is involved in mediating several cellular processes, including angiogenesis, by promoting cell adhesion, migration, and signal transduction, and is involved in cell fusion processes linked to fertilization, osteoclastogenesis, and myogenesis.

Target Antigen Name:	CD9
Alternative Names:	DRAP-24, MRP-1, Tetraspanin-29
Gene ID:	928
Species Reactivity:	Human, Rhesus, Cynomolgus, Baboon, Chimpanzee, African Green Monkey, Capuchin Monkey, Cow, Dog, Horse, Rabbit, Sheep
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	HI9a
Isotype:	IgG1, kappa
Immunogen:	Not determined
Conjugate:	Unconjugated

Applications

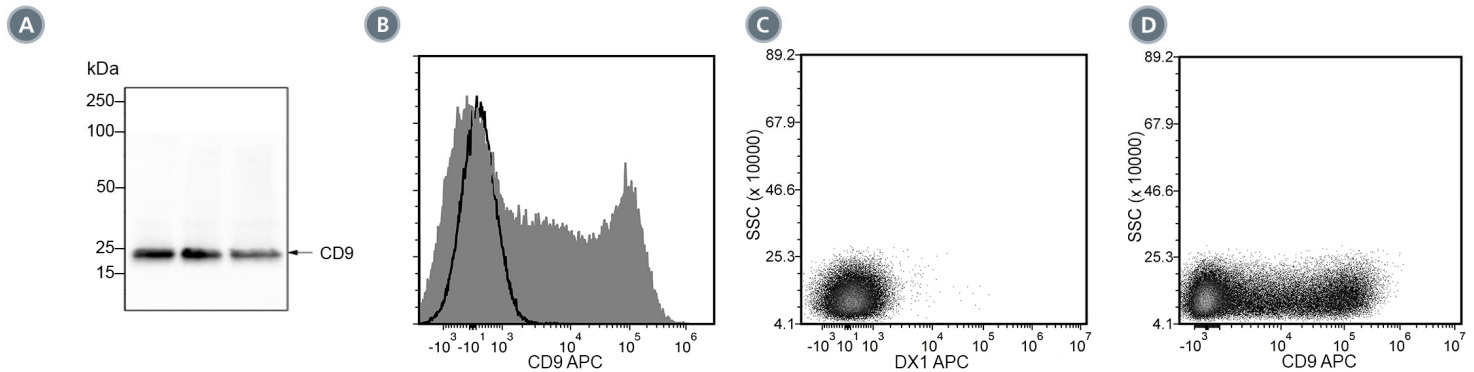
Verified:	FC, WB
Reported:	FACS, FC, ICC, IF, IHC, WB
Special Applications:	This antibody clone has been verified for purity assessments of extracellular vesicles isolated with EasySep™ Extracellular Vesicle Human Positive Selection Kits.

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Stable until expiry date (EXP) on label.
Directions for Use:	The suggested use of this antibody is: FC, $\leq 0.5 \mu\text{g}$ per 1×10^6 cells in 100 µL or per 100 µL of whole blood; WB, 0.5 - 1 µg/mL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Western blot analysis of extracellular vesicles (EVs) with Anti-Human CD9 Antibody, Clone HI9a. EVs were isolated from mesenchymal stromal cell-conditioned medium using a 2 mL EV size exclusion chromatography column. Lanes (left to right) were loaded with isolated fractions 9, 10, and 11, respectively.

(B) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) stimulated with phorbol myristate acetate (PMA) and ionomycin, then labeled with Anti-Human CD9 Antibody, Clone HI9a, followed by a goat anti-mouse IgG1 antibody, APC (filled histogram), or Anti-Dextran Antibody, Clone DX1 (Catalog #60026) as an isotype control, followed by a goat anti-mouse IgG1 antibody, APC (solid line histogram). Viable lymphocytes were gated for analysis.

(C) Flow cytometry analysis of human PBMCs (stimulated with PMA and ionomycin) labeled with Anti-Dextran Antibody, Clone DX1 (Catalog #60026) as an isotype control, followed by a goat anti-mouse IgG1 antibody, APC.

(D) Flow cytometry analysis of human PBMCs (stimulated with PMA and ionomycin) labeled with Anti-Human CD9 Antibody, Clone HI9a, followed by a goat anti-mouse IgG1 antibody, APC.

Related Products

For related products, including EasySep™ Extracellular Vesicle Selection Kits and antibodies, visit www.stemcell.com or contact us at techsupport@stemcell.com.

References

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