Data Sheet (Cat.No.TMAH-00231)

Anti-CD9 Antibody (5F780)

Product Details

Ig Type:	IgG1
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	5F780
Purification:	Protein G purified

Applications

Verified Activity:	1. Western Blot -Positive WB detected in: U87 whole cell lysate, PC-3 whole cell lysate, 293 whole cell lysate, U251 whole cell lysate, A549 whole cell lysate, MG-63 whole cell lysate, MCF-7 whole cell lysate -All lanes CD9 antibody at 1:2000 -Secondary: Goat polyclonal to mouse IgG at 1/50000 dilution -Predicted band size: 25 KDa -Observed band size: 25 KDa -Exposure time: 5min 2. Western Blot -Positive WB detected in: A549 whole cell lysate at 20μg, 10μg, 5μg, 2.5μg whole cell lysate -All lanes CD9 antibody at 1:2000 -Secondary: Goat polyclonal to mouse IgG at 1/50000 dilution -Predicted band size: 25 KDa -Observed band size: 25 KDa -Exposure time: 5min 3. Western Blot -Positive WB detected in: 20μg A549 whole cell lysate -All lanes: CD9 antibody at 1:1000, 1:2000, 1:4000, 1:8000, 1:16000, 1:32000 -Secondary: Goat polyclonal to mouse IgG at 1/50000 dilution -Predicted band size: 25 KDa -Observed band size: 25 KDa -Exposure time: 5min 4. Western Blot -Positive WB detected in: 1.Exosomes extracted from plasma 2.Exosomes extracted from serum 3.Exosomes extracted from Hela cells -All lanes: CD9 antibody at 1:1000 -Secondary: Goat polyclonal to mouse IgG at 1/50000 dilution -Predicted band size: 25 KDa -Observed band size: 25 KDa -Exposure time: 5min 5. IHC image of TMAH-00231 diluted at 1:50 and staining in paraffin-embedded human breast cancer tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at 37°C. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG labeled by HRP and visualized

using 0.05% DAB.
6. IHC image of TMAH-00231 diluted at 1:50 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at 37°C. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG labeled by HRP and visualized using 0.05% DAB.
7. Immunofluorescence staining of Hela cells with TMAH-00231 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).
8. Immunofluorescence staining of HepG2 cells with TMAH-00231 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).
9. Overlay histogram showing A549 cells stained with TMAH-00231 (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1µg/1*10^6 cells) for 1 h at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/100 dilution for 30min at 4°C. Isotype control antibody (green line) was mouse IgG1 (1µg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.
10. Overlay histogram showing Jurkat cells stained with TMAH-00231 (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1µg/1*10^6 cells) for 1 h at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/100 dilution for 30min at 4°C. Isotype control antibody (green line) was mouse IgG1(1µg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.
11. Overlay histogram showing PC-3 cells stained with TMAH-00231 (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1µg/1*10^6 cells) for 1 h at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/100 dilution for 30min at 4°C. Isotype control antibody (green line) was mouse IgG1 (1µg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.
12. Overlay histogram showing U87 cells stained with TMAH-00231 (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1µg/1*10^6 cells) for 1 h at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/100 dilution for 30min at 4°C. Isotype control antibody (green line) was mouse IgG1 (1µg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.

Application: ELISA,WB

Properties

Purity:	>95%
Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human CD9 antigen Protein (112-195AA)
Antigen Species:	Human
Gene ID:	928
Uniprot ID:	P21926
Synonyms:	TSPAN-29;TSPAN29;CD9 molecule;MIC3;MRP-1;DRAP-27;BTCC-1
Biology Area:	Cardiovascular

Research Background

Integral membrane protein associated with integrins, which regulates different processes, such as sperm-egg fusion, platelet activation and aggregation, and cell adhesion. 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. In myoblasts, associates with CD81 and PTGFRN and inhibits myotube fusion during muscle regeneration. 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. Also prevents the fusion between mononuclear cell progenitors into osteoclasts in charge of bone resorption. Acts as a receptor for PSG17. Involved in platelet activation and aggregation. Regulates paranodal junction formation. Involved in cell adhesion, cell motility and tumor metastasis.

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