

Product datasheet

Anti-CD9 antibody [EPR23105-121] ab236630

KO VALIDATED Recombinant RabMAB

★★★★★ 3 Abreviews 2 References 9 Images

Overview

Product name	Anti-CD9 antibody [EPR23105-121]
Description	Rabbit monoclonal [EPR23105-121] to CD9
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, IHC-P, Flow Cyt, IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, MCF7, A549, HCT 116, Human tonsil and Human colon lysates. IHC-P: Human spleen and Human bladder carcinoma tissues. ICC/IF: HCT 116 cells. Flow Cyt: HCT 116 cells. IP: HCT 116 cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR23105-121

Isotype

IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab236630 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★☆ (2)	1/1000. Detects a band of approximately 22 kDa (predicted molecular weight: 25 kDa).
ICC/IF	★★★★★ (1)	1/500.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt		1/50.
IP		1/30.

Target

Function

Involved in platelet activation and aggregation. Regulates paranodal junction formation. Involved in cell adhesion, cell motility and tumor metastasis. Required for sperm-egg fusion.

Tissue specificity

Expressed by a variety of hematopoietic and epithelial cells.

Sequence similarities

Belongs to the tetraspanin (TM4SF) family.

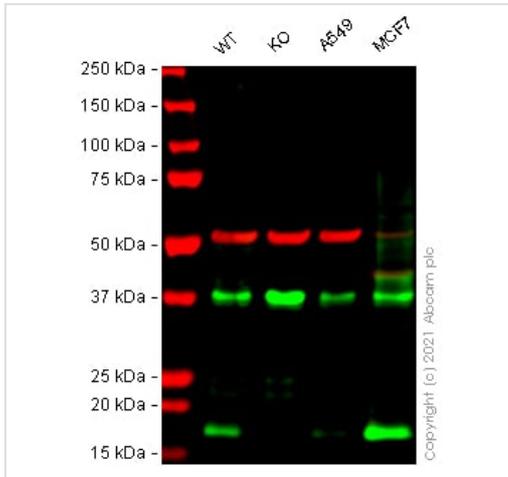
Post-translational modifications

Protein exists in three forms with molecular masses between 22 and 27 kDa, and is known to carry covalently linked fatty acids.

Cellular localization

Membrane.

Images



Western blot - Anti-CD9 antibody [EPR23105-121] (ab236630)

All lanes : Anti-CD9 antibody [EPR23105-121] (ab236630) at 1/1000 dilution

Lane 1 : Wild-type HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : CD9 knockout HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 3 : A549 (Human lung carcinoma cell line) whole cell lysate

Lane 4 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

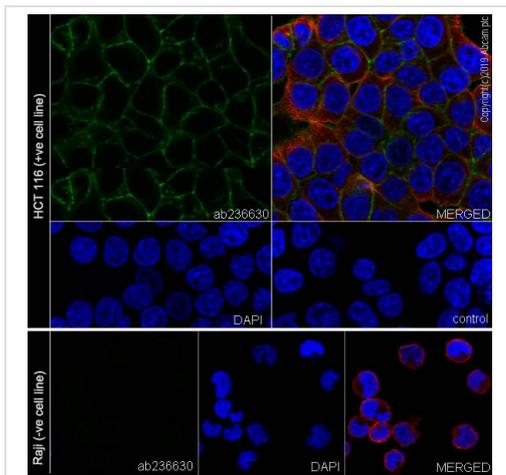
Performed under reducing conditions.

Predicted band size: 25 kDa

Observed band size: 18 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab236630 observed at 18 kDa. Red - loading control [ab7291](#) (Mouse anti-Alpha Tubulin [DM1A]) observed at 55 kDa.

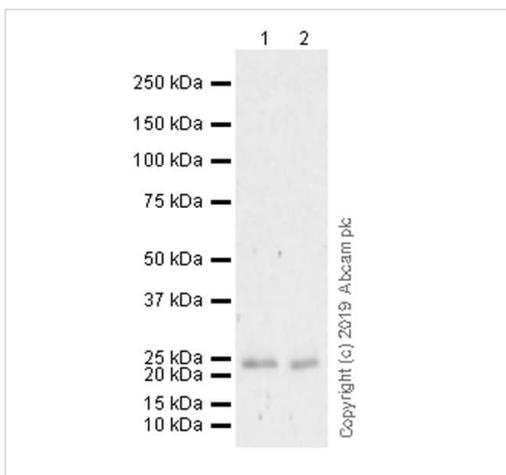
ab236630 was shown to react with CD9 in wild-type HeLa cells in Western blot with loss of signal observed in CD9 knockout cell line [ab255375](#) (CD9 knockout cell lysate [ab263754](#)). Wild-type HeLa and CD9 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with ab236630 and [ab7291](#) (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-CD9 antibody [EPR23105-121] (ab236630)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HCT 116 (human colorectal carcinoma epithelial cell) cells labelling CD9 with ab236630 at 1/500 dilution, followed by [ab150077](#) AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing membranous staining in HCT 116 cell line. **Negative control:** Raji (PMID: 8921952). [ab195889](#) Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is [ab150077](#) AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.



Western blot - Anti-CD9 antibody [EPR23105-121] (ab236630)

All lanes : Anti-CD9 antibody [EPR23105-121] (ab236630) at 1/1000 dilution

Lane 1 : Human tonsil lysate

Lane 2 : Human colon lysate

Lysates/proteins at 20 µg per lane.

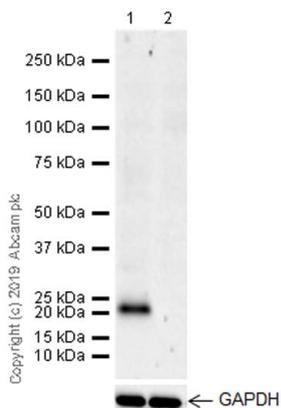
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 25 kDa

Observed band size: 22 kDa

Blocking and diluting buffer and concentration: 5% NFDm/TBST.
The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 3275469).
Exposure time: 3 minutes.



Western blot - Anti-CD9 antibody [EPR23105-121] (ab236630)

All lanes : Anti-CD9 antibody [EPR23105-121] (ab236630) at 1/1000 dilution

Lane 1 : HCT 116 (human colorectal carcinoma epithelial cell) whole cell lysate

Lane 2 : Raji (human Burkitts lymphoma b lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 25 kDa

Observed band size: 22 kDa

Blocking and diluting buffer and concentration: 5% NFD/MBST

This blot was developed using a higher sensitivity ECL substrate.

The molecular weight observed is consistent with what has been described in the literature (PMID: 3275469).

Negative control: Raji (PMID: 8921952). Exposure time: 3 minutes



Immunoprecipitation - Anti-CD9 antibody [EPR23105-121] (ab236630)

CD9 was immunoprecipitated from 0.35 mg HCT 116 (human colorectal carcinoma epithelial cell) whole cell lysate with ab236630 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab236630 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/1000 dilution.

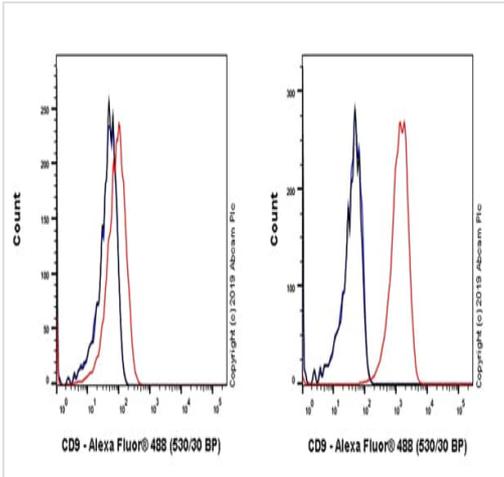
Lane 1: HCT 116 (human colorectal carcinoma epithelial cell) whole cell lysate 10µg.

Lane 2: ab236630 IP in HCT 116 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab236630 in HCT 116 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFD/MBST.

Exposure time: 30 seconds.

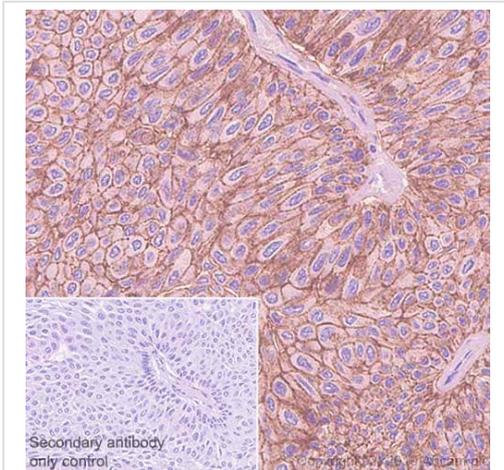


Flow Cytometry - Anti-CD9 antibody [EPR23105-121] (ab236630)

Flow cytometric analysis of Raji (human Burkitt's lymphoma B lymphocyte, Left) / HCT 116 (human colorectal carcinoma epithelial cell, Right) cells labelling CD9 with ab236630 at 1/50 dilution compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor[®] 488, ab150077) at 1/2000 was used as the secondary antibody.

Negative control: Raji (PMID: 8921952).

Gated on viable cells.

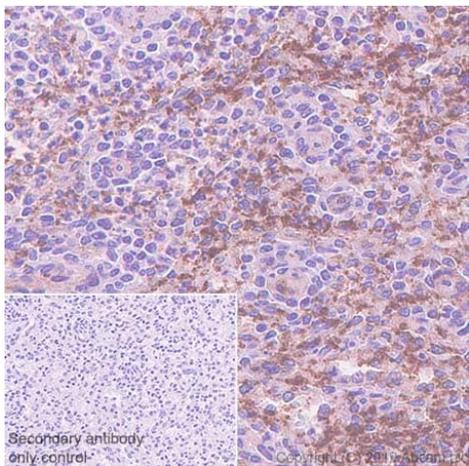


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD9 antibody [EPR23105-121] (ab236630)

Immunohistochemical analysis of paraffin-embedded Human bladder carcinoma tissue labeling CD9 with ab236630 at 1/100 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on human bladder carcinoma. The section was incubated with ab236630 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD9 antibody [EPR23105-121] (ab236630)

Immunohistochemical analysis of paraffin-embedded Human spleen tissue labeling CD9 with ab236630 at 1/100 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on platelets of human spleen. The section was incubated with ab236630 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-CD9 antibody [EPR23105-121] (ab236630)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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