

Product datasheet

Anti-Podoplanin / gp36 antibody [EPR22182] ab236529

Recombinant **RabMAb**

★★★★☆ 1 Abreviews 8 Images

Overview

Product name	Anti-Podoplanin / gp36 antibody [EPR22182]
Description	Rabbit monoclonal [EPR22182] to Podoplanin / gp36
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Flow Cyt, IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human Podoplanin/ gp36 aa 1-150. The exact sequence is proprietary. Database link: Q86YL7
Positive control	WB: U-2 OS and U-87 MG whole cell lysates; Human seminoma, tonsil, lymph node and stomach lysates. IHC-P: Human colon, mesothelioma and Kaposi's sarcoma tissues. Flow Cyt: U-87 MG and U-2 OS cells. IP: U-2 OS whole cell lysate.
General notes	Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . This product is a recombinant rabbit monoclonal antibody .

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	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22182
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab236529** in the following tested applications.

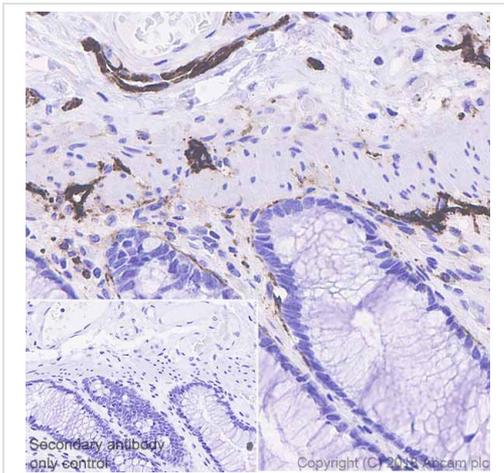
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★☆	1/1000. Detects a band of approximately 38 kDa (predicted molecular weight: 16 kDa).
IHC-P		1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt		1/300.
IP		1/30.

Target

Function	May be involved in cell migration and/or actin cytoskeleton organization. When expressed in keratinocytes, induces changes in cell morphology with transfected cells showing an elongated shape, numerous membrane protrusions, major reorganization of the actin cytoskeleton, increased motility and decreased cell adhesion. Required for normal lung cell proliferation and alveolus formation at birth. Induces platelet aggregation. Does not have any effect on folic acid or amino acid transport. Does not function as a water channel or as a regulator of aquaporin-type water channels.
Tissue specificity	Highly expressed in placenta, lung, skeletal muscle and brain. Weakly expressed in brain, kidney and liver. In placenta, expressed on the apical plasma membrane of endothelium. In lung, expressed in alveolar epithelium. Up-regulated in colorectal tumors and expressed in 25% of early oral squamous cell carcinomas.
Sequence similarities	Belongs to the podoplanin family.
Post-translational modifications	Extensively O-glycosylated. Contains sialic acid residues. O-glycosylation is necessary for platelet aggregation activity. The N-terminus is blocked.
Cellular localization	Membrane. Cell projection > filopodium membrane. Cell projection > lamellipodium membrane. Cell projection > microvillus membrane. Cell projection > ruffle membrane. Localized to actin-rich microvilli and plasma membrane projections such as filopodia, lamellipodia and ruffles.

Images



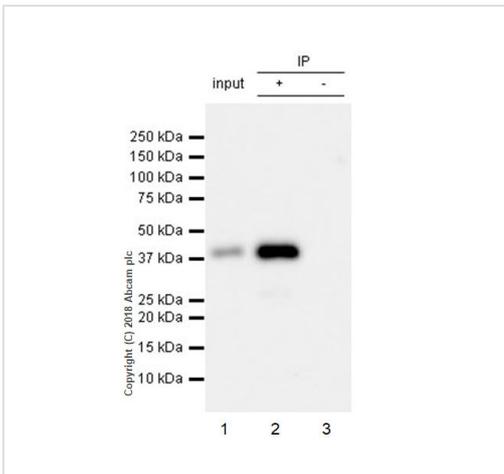
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Podoplanin / gp36 antibody [EPR22182] (ab236529)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Podoplanin / gp36 with ab236529 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in lymphatic endothelial cells of human colon (PMID: 28101903; PMID: 27798887) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Podoplanin / gp36 antibody [EPR22182] (ab236529)

Podoplanin / gp36 was immunoprecipitated from 0.35 mg of U-2 OS (human bone osteosarcoma epithelial cell line) whole cell lysate with ab236529 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab236529 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.

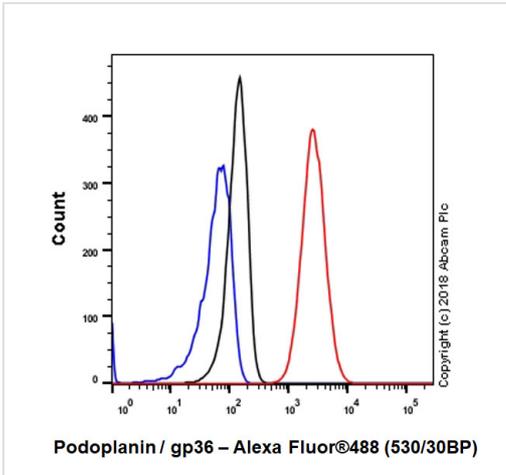
Lane 1: U-2 OS whole cell lysate 10 µg (Input).

Lane 2: ab236529 IP in U-2 OS whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab236529 in U-2 OS whole cell lysate.

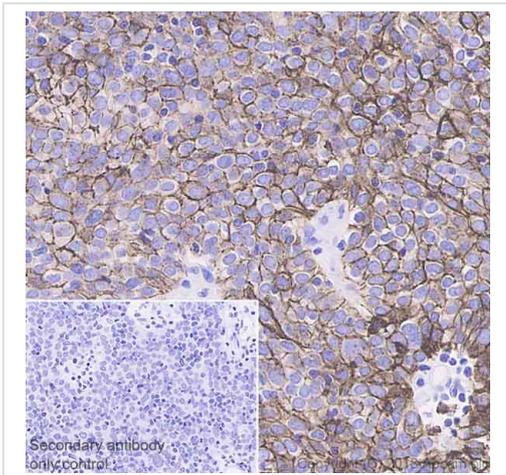
Blocking and dilution buffer and concentration: 5% NFD/MTBST.

Exposure time: 30 seconds.



Flow Cytometry - Anti-Podoplanin / gp36 antibody [EPR22182] (ab236529)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized U-2 OS (human bone osteosarcoma epithelial cell line) cell line labeling Podoplanin / gp36 with ab236529 at 1/300 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.



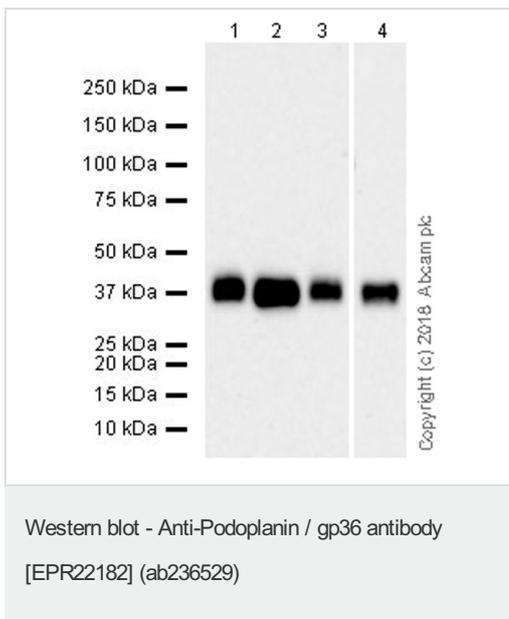
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Podoplanin / gp36 antibody [EPR22182] (ab236529)

Immunohistochemical analysis of paraffin-embedded human mesothelioma tissue labeling Podoplanin / gp36 with ab236529 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous and weak cytoplasmic staining in tumor cells of human mesothelioma (PMID: 16670463) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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All lanes : Anti-Podoplanin / gp36 antibody [EPR22182] (ab236529) at 1/1000 dilution

Lane 1 : Human seminoma lysate

Lane 2 : Human tonsil lysate

Lane 3 : Human lymph node lysate

Lane 4 : Human stomach 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: 16 kDa

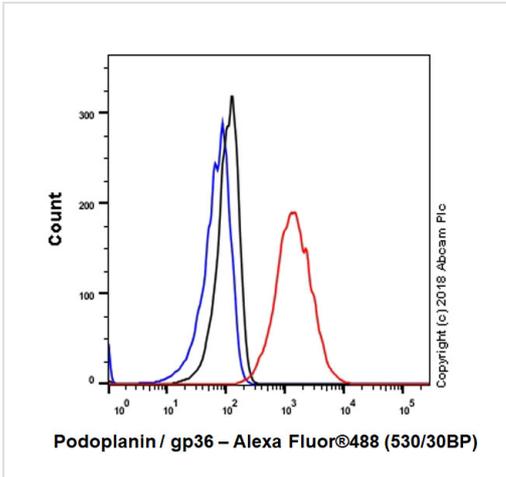
Observed band size: 38 kDa

[why is the actual band size different from the predicted?](#)

Exposure time: 3 minutes

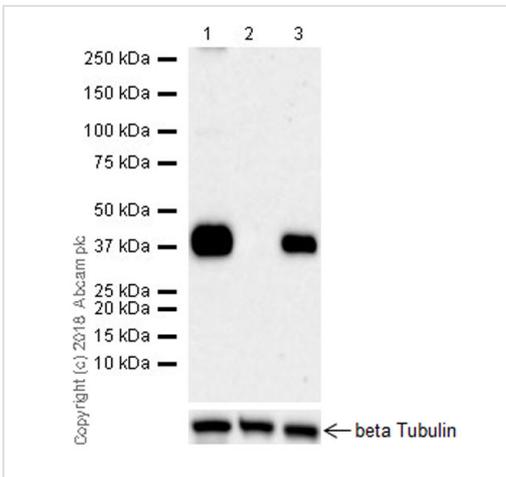
Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular mass observed is consistent with what has been described in the literature (PMID: 10408868; PMID: 17279584).



Flow Cytometry - Anti-Podoplanin / gp36 antibody
[EPR22182] (ab236529)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized U-87 MG (human glioblastoma-astrocytoma epithelial cell line) cell line labeling Podoplanin / gp36 with ab236529 at 1/300 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-Podoplanin / gp36 antibody
[EPR22182] (ab236529)

All lanes : Anti-Podoplanin / gp36 antibody [EPR22182]
(ab236529) at 1/1000 dilution

Lane 1 : U-2 OS (human bone osteosarcoma epithelial cell line)
whole cell lysate

Lane 2 : HUVEC (human umbilical vein endothelial cell line) whole
cell lysate

Lane 3 : U-87 MG (human glioblastoma-astrocytoma epithelial cell
line) 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: 16 kDa

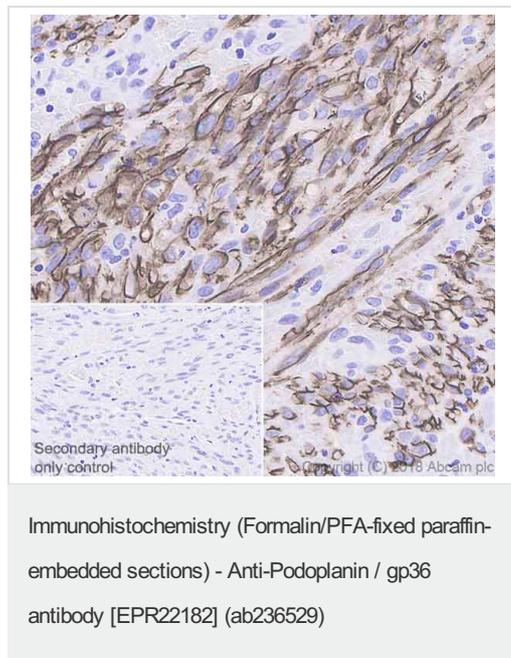
Observed band size: 38 kDa [why is the actual band size different from the predicted?](#)

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFD/MTBST.

The molecular mass observed is consistent with what has been described in the literature (PMID: 10408868; PMID: 17279584).

Negative control: HUVEC (PMID: 21920451).



Immunohistochemical analysis of paraffin-embedded human Kaposi's sarcoma tissue labeling Podoplanin / gp36 with ab236529 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous and cytoplasmic staining in tumor cells of human Kaposi's sarcoma (PMID: 11950918) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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