

Product datasheet

Anti-Podoplanin antibody [RTD4E10] - BSA and Azide free ab11936

★★★★★ [12 Abreviews](#) [81 References](#) [2 Images](#)

Overview

Product name	Anti-Podoplanin antibody [RTD4E10] - BSA and Azide free
Description	Syrian hamster monoclonal [RTD4E10] to Podoplanin - BSA and Azide free
Host species	Syrian hamster
Specificity	The monoclonal antibody will detect podoplanin on the surface of mouse lymphatic endothelial cells and some epithelial cell types by immunostaining or immunohistochemistry. This antibody is designed to detect podoplanin, which is also referred to as gp38 (mouse and rat) and gp36 (human).
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Mouse Does not react with: Human
Immunogen	Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.
Positive control	Mouse normal skin FFPE tissue sections (IHC-P)
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	Protein G purified
Purification notes	Purified from cell culture supernatant.

Clonality	Monoclonal
Clone number	RTD4E10
Isotype	IgG1

Applications

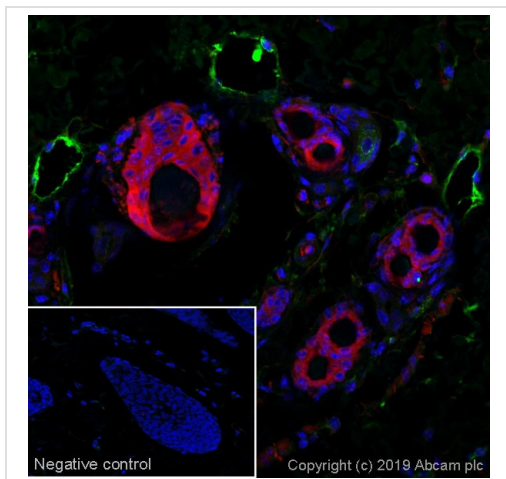
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab11936 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (6)	1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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



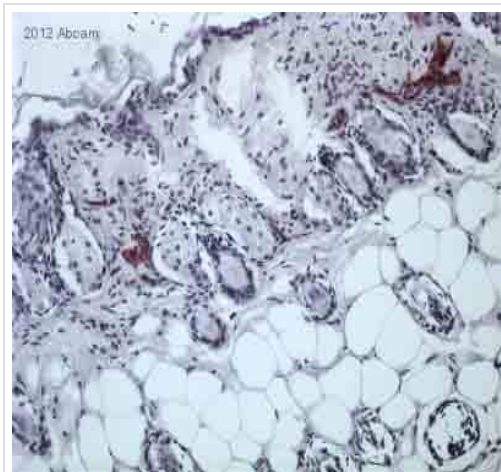
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Syrian hamster monoclonal [RTD4E10] to Podoplanin - BSA and Azide free (ab11936)

IHC image of Podoplanin staining in a section of formalin-fixed paraffin-embedded normal mouse skin. The section was pre-treated using pressure cooker heat mediated antigen retrieval with sodium citrate buffer (pH6). Non-specific protein-protein interactions were then blocked in TBS containing 0.025% (v/v) Triton X-100, 0.3M (w/v) glycine and 1% (w/v) BSA for 1h at room temperature. The section was then incubated overnight at +4°C in TBS containing 0.025% (v/v) Triton X-100 and 1% (w/v) BSA with ab11936 at 1/250. The secondary antibody (shown in green) was **ab180063** at 1/500 (Goat Anti-Syrian hamster IgG H&L (Alexa Fluor® 488) and counterstained using **ab190573**, Rabbit monoclonal [EP1332Y] to alpha Tubulin - Microtubule Marker (Alexa Fluor® 647), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Fluoromount®.

The negative control (inset) is a secondary-only assay to demonstrate low non-specific binding of the secondary antibody.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Syrian hamster monoclonal [RTD4E10] to Podoplanin - BSA and Azide free (ab11936)

Image courtesy of an anonymous Abreview.

ab11936 staining Podoplanin in murine skin tissue sections by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Tissue was fixed in paraformaldehyde and an enzymatic antigen retrieval step was performed using Protein K. Samples were then blocked with 5% serum for 30 minutes at room temperature and then incubated with ab11936 at a 1/400 dilution for 16 hours at 4°C. The secondary used was a biotin conjugated goat anti-hamster IgG used at a 1/500 dilution.

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