


Product datasheet

Anti-Rhodopsin antibody ab112576

★★★★★ 1 Abreviews 2 References 2 Images

Overview

Product name	Anti-Rhodopsin antibody
Description	Rabbit polyclonal to Rhodopsin
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Rat, Human Predicted to work with: Mouse, Rabbit, Pig 
Immunogen	Synthetic peptide corresponding to Human Rhodopsin aa 150-250 conjugated to keyhole limpet haemocyanin. (Peptide available as ab138374)
Positive control	WB: Y79 and WERI whole cell lysates. IHC-P: Rat normal eye tissue.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. 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, as well as 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	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
	Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab112576** in the following tested applications.

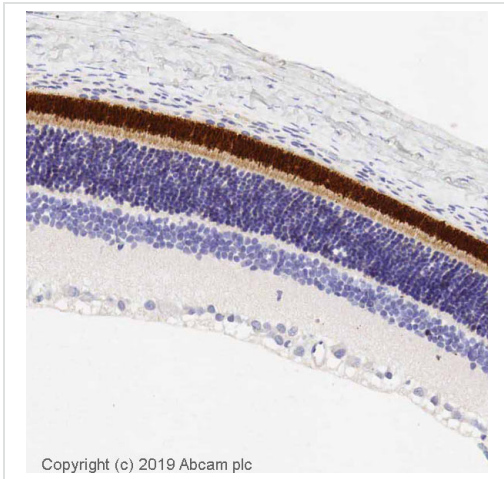
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 48 kDa (predicted molecular weight: 39 kDa).
IHC-P		Use a concentration of 0.5 µg/ml. The optimal concentration will need to be determined. 0.5ug/mL gave a good result with a polymer-HRP secondary antibody reagent.

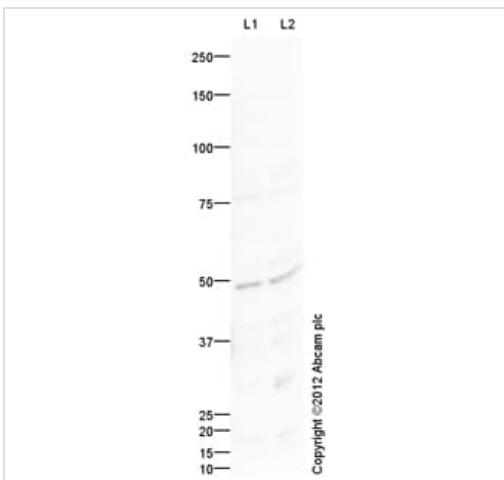
Target

Function	Photoreceptor required for image-forming vision at low light intensity. Required for photoreceptor cell viability after birth. Light-induced isomerization of 11-cis to all-trans retinal triggers a conformational change leading to G-protein activation and release of all-trans retinal.
Tissue specificity	Rod shaped photoreceptor cells which mediates vision in dim light.
Involvement in disease	Retinitis pigmentosa 4 Night blindness, congenital stationary, autosomal dominant 1
Sequence similarities	Belongs to the G-protein coupled receptor 1 family. Opsin subfamily.
Post-translational modifications	Phosphorylated on some or all of the serine and threonine residues present in the C-terminal region. Contains one covalently linked retinal chromophore.
Cellular localization	Membrane. Synthesized in the inner segment (IS) of rod photoreceptor cells before vectorial transport to the rod outer segment (OS) photosensory cilia.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rhodopsin antibody (ab112576)



Western blot - Anti-Rhodopsin antibody (ab112576)

IHC image of Rhodopsin staining in Rat normal eye formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab112576, 0.5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

All lanes : Anti-Rhodopsin antibody (ab112576) at 1 µg/ml

Lane 1 : Y79 (Human retinoblastoma cell line) Whole Cell Lysate

Lane 2 : WERI (Human Retinoblastoma) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 39 kDa

Observed band size: 48 kDa

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

Exposure time: 2 minutes

The predicted molecular weight of Rhodopsin is 39 kDa (SwissProt), however we expect to observe a banding pattern around 48 kDa. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.

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

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