

Product datasheet

Alexa Fluor® 647 Anti-PROX1 antibody [EPR19273] ab225414

Recombinant RabMAb

★★★★★ 1 Abreviews 2 Images

Overview

Product name	Alexa Fluor® 647 Anti-PROX1 antibody [EPR19273]
Description	Alexa Fluor® 647 Rabbit monoclonal [EPR19273] to PROX1
Host species	Rabbit
Conjugation	Alexa Fluor® 647. Ex: 652nm, Em: 668nm
Tested applications	Suitable for: IHC-Fr
Species reactivity	Reacts with: Rat Predicted to work with: Mouse, Human 
Immunogen	Recombinant fragment within Mouse PROX1 aa 50-300. The exact sequence is proprietary. Database link: P48437
Positive control	IHC-Fr: Normal rat brain tissue.
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> <p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact</p>

Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@thermofisher.com.

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

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.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

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.

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.

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.

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. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR19273
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab225414** in the following tested applications.

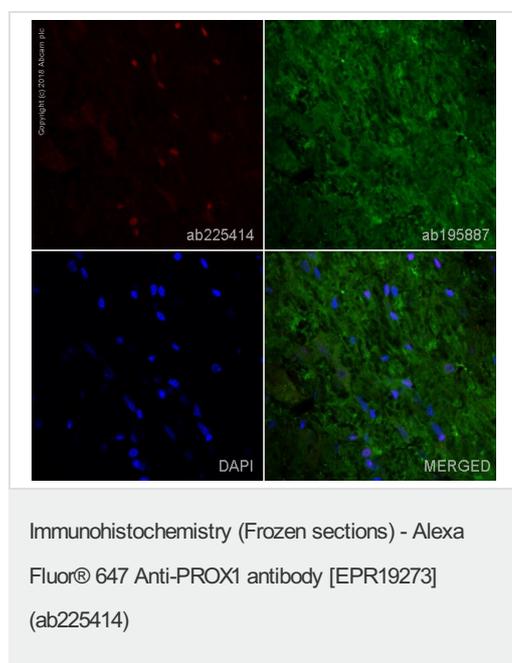
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		1/100.

Target

Function	Transcription factor involved in developmental processes such as cell fate determination, gene transcriptional regulation and progenitor cell regulation in a number of organs. Plays a critical role in embryonic development and functions as a key regulatory protein in neurogenesis and the development of the heart, eye lens, liver, pancreas and the lymphatic system. Involved in the regulation of the circadian rhythm. Represses: transcription of the retinoid-related orphan receptor ROR γ , transcriptional activator activity of RORA and ROR γ and the expression of RORA/G-target genes including core clock components: ARNTL/BMAL1, NPAS2 and CRY1 and metabolic genes: AVPR1A and ELOVL3.
Tissue specificity	Most actively expressed in the developing lens. Detected also in embryonic brain, lung, liver and kidney. In adult, it is more abundant in heart and liver than in brain, skeletal muscle, kidney and pancreas.
Sequence similarities	Belongs to the Prospero homeobox family. Contains 1 Prospero-type homeobox DNA-binding domain.
Domain	The prospero-type homeobox DNA-binding domain is essential for repression of ROR γ transcriptional activator activity.
Cellular localization	Nucleus. ROR γ promotes its nuclear localization.
Form	Prox1 is a specific and required regulator of the development of the lymphatic system and that the vascular and lymphatic systems develop independently. Sox18 directly activates Prox1 transcription by binding to its proximal promoter.

Images



IHC image of PROX1 staining in a section of frozen normal rat brain.

The section was fixed using 10% formaldehyde in 1XPBS for 10 minutes. No antigen retrieval step was performed prior to staining. 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 ab225414 at 1/100 dilution (shown in red) and counterstained using ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 1/250 dilution (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®.

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.

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

Alexa Fluor® 647 Anti-PROX1 antibody [EPR19273]
(ab225414)

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

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