

Product datasheet

Anti-PROX1 antibody ab38692

★★★★☆ 8 Abreviews 7 References 2 Images

Overview

Product name	Anti-PROX1 antibody
Description	Rabbit polyclonal to PROX1
Host species	Rabbit
Specificity	We have had mixed results for use of this antibody in IHC-P. The abReview below from an external researcher reports good staining with this antibody with human heart tissue, but we have had mixed results with this antibody in internal QC testing in IHC-P. Thus, we are removing IHC-P as a guaranteed application and welcome any feedback from customers who have used this antibody in IHC-P.
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 150 - 250 of Human PROX1. Read Abcam's proprietary immunogen policy (Peptide available as ab38691 .)
Positive control	This antibody gave a positive signal in the following human whole cell lysates : HepG2 and SHSY-5Y. HEK293 human whole cell lysate is a negative control lysate. IHC-P: Human heart tissue.

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	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab38692** 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 2 µg/ml. Detects a band of approximately 105 kDa (predicted molecular weight: 83 kDa).
IHC-P	★★★★★	Use at an assay dependent concentration.

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 RORγ, transcriptional activator activity of RORA and RORγ and the expression of RORA/RORγ-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.

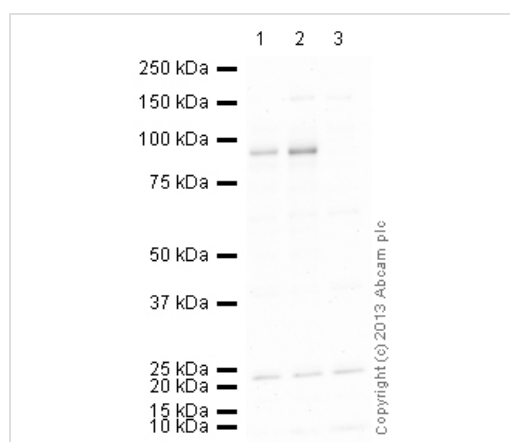
Sequence similarities Belongs to the Prospero homeobox family.
Contains 1 Prospero-type homeobox DNA-binding domain.

Domain The prospero-type homeobox DNA-binding domain is essential for repression of RORγ transcriptional activator activity.

Cellular localization Nucleus. RORγ 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



Western blot - Anti-PROX1 antibody (ab38692)

All lanes : Anti-PROX1 antibody (ab38692) at 1 µg/ml (3% Milk Block)

Lane 1 : HepG2 (Human) Whole Cell Lysate ([ab52257](#))

Lane 2 : SHSY-5Y (Human neuroblastoma cell line) Whole Cell Lysate ([ab45968](#))

Lane 3 : HEK293 (Human) Whole Cell Lysate ([ab52256](#))

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

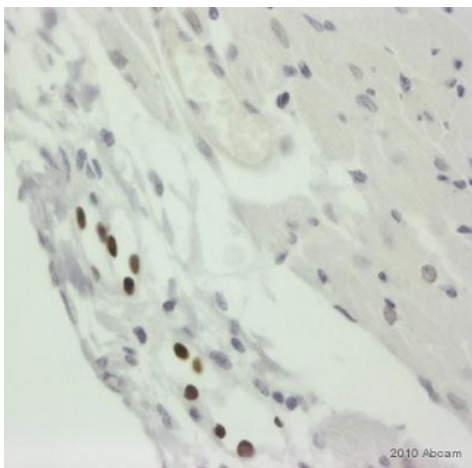
Predicted band size: 83 kDa

Observed band size: 95 kDa

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

Additional bands at: 25 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 4 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PROX1 antibody (ab38692)

Formaldehyde-fixed, paraffin-embedded human heart tissue stained for PROX1 using ab38692 at 1/250 dilution in immunohistochemical analysis. Incubation with primary antibody was performed for 45 minutes at 20°C. Goat anti-rabbit/mouse HRP polymer was used as a secondary antibody.

Heat mediated antigen retrieval was performed. Tissue sections were blocked with peroxidase for 5 minutes followed by a 10 minute protein block.

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