


Product datasheet

Anti-PROX1 antibody [5G10] ab33219

★★★★☆ [5 Abreviews](#) [6 References](#) [2 Images](#)

Overview

Product name	Anti-PROX1 antibody [5G10]
Description	Mouse monoclonal [5G10] to PROX1
Host species	Mouse
Tested applications	Suitable for: WB Unsuitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Rat 
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	This antibody gave a positive result in HepG2 (Human hepatocellular liver carcinoma cell line) Nuclear Lysate .
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <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. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	5G10

Isotype

IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab33219 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)	Use a concentration of 10 µg/ml. Detects a band of approximately 83 kDa (predicted molecular weight: 83 kDa).

Application notes

Is unsuitable for IHC-P.

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 RORG, transcriptional activator activity of RORA and RORG 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 RORG transcriptional activator activity.

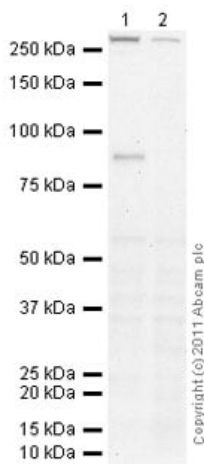
Cellular localization

Nucleus. RORG 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 [5G10]
(ab33219)

All lanes : Anti-PROX1 antibody [5G10] (ab33219) at 10 µg/ml

Lane 1 : Hep G2 nuclear extract lysate (**ab14660**)

Lane 2 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate (negative control)

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed (**ab97040**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 83 kDa

Observed band size: 83 kDa

Exposure time: 20 minutes

Anti-PROX1 antibody [5G10] (ab33219) at 10 µg/ml + P3 Dentate gyrus whole tissue lysate at 50 µg

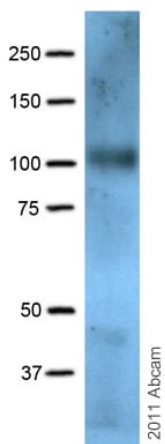
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 83 kDa

Observed band size: 105 kDa

Exposure time: 20 minutes



Western blot - Anti-PROX1 antibody [5G10]
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Image courtesy of an Abreview submitted by Dr. Xia Chen

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