

Anti-PROX1 antibody [EPR19273] ab199359

リコンビナント **RabMAb**

★★★★☆ **6 Abreviews** **16 References** 画像数 8

製品の概要

製品名	Anti-PROX1 antibody [EPR19273]
製品の詳細	Rabbit monoclonal [EPR19273] to PROX1
由来種	Rabbit
アプリケーション	適用あり: ICC/IF, WB, IHC-P, ChIC/CUT&RUN-seq
種交差性	交差種: Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Human brain and fetal liver lysates; SH-SY5Y and HepG2 whole cell lysates; Mouse and rat brain and hippocampus lysates. IHC-P: Mouse and rat hippocampus tissues. ICC/IF: SH-SY5Y cells. ChIC/CUT&RUN-Seq: HepG2 cells.
特記事項	<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>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol, 0.05% BSA</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR19273

アプリケーション

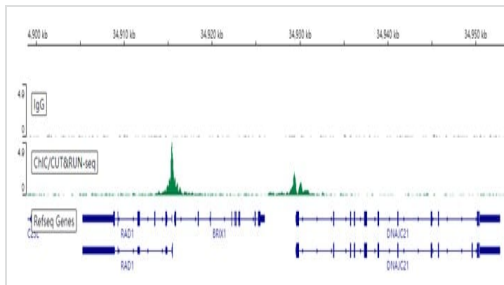
The Abpromise guarantee Abpromise保証は、 次のテスト済みアプリケーションにおけるab199359の使用に適用されます
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		1/500.
WB		1/1000. Detects a band of approximately 83 kDa (predicted molecular weight: 83 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC is recommended for rat and mouse only
ChIC/CUT&RUN-seq		Use at an assay dependent concentration. 5 µg

ターゲット情報

機能	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/G-target genes including core clock components: ARNTL/BMAL1, NPAS2 and CRY1 and metabolic genes: AVPR1A and ELOVL3.
組織特異性	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.
配列類似性	Belongs to the Prospero homeobox family. Contains 1 Prospero-type homeobox DNA-binding domain.
ドメイン	The prospero-type homeobox DNA-binding domain is essential for repression of RORγ transcriptional activator activity.
細胞内局在	Nucleus. RORγ promotes its nuclear localization.
製品の状態	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.

画像

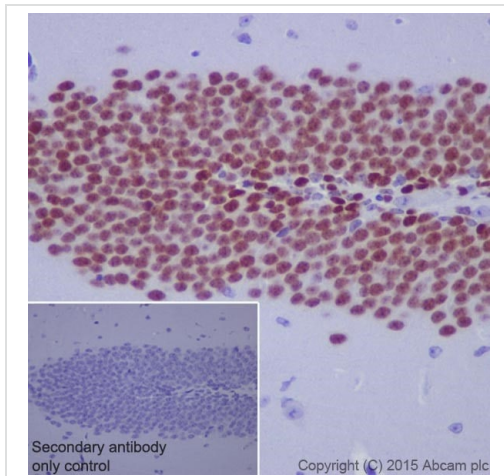


ChIC/CUT&RUN sequencing - Anti-PROX1 antibody [EPR19273] (ab199359)

ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/mL, 2.5×10^5 HepG2 (Human liver hepatocellular carcinoma cell line) cells and 5 μ g of ab199359 [EPR19273]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control **ab172730** is also shown.

Additional screenshots of mapped reads can be downloaded [here](#).

The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PROX1 antibody [EPR19273] (ab199359)

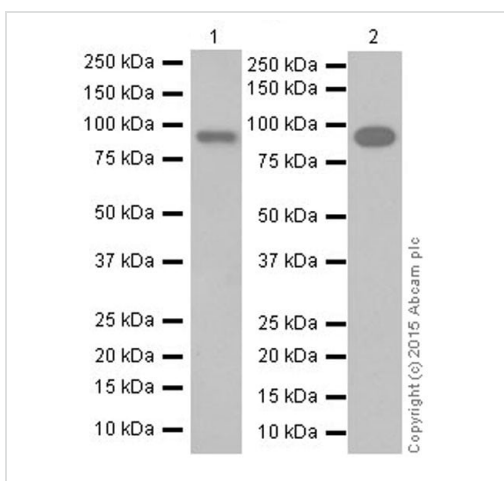
Immunohistochemical analysis of paraffin-embedded mouse hippocampus tissue labeling PROX1 with ab199359 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Nucleus staining on neurons of mouse hippocampus is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-PROX1 antibody [EPR19273] (ab199359)

All lanes : Anti-PROX1 antibody [EPR19273] (ab199359) at 1/1000 dilution

Lane 1 : Human fetal liver lysate

Lane 2 : Human brain lysate

Lysates/proteins at 10 μ g per lane.

Secondary

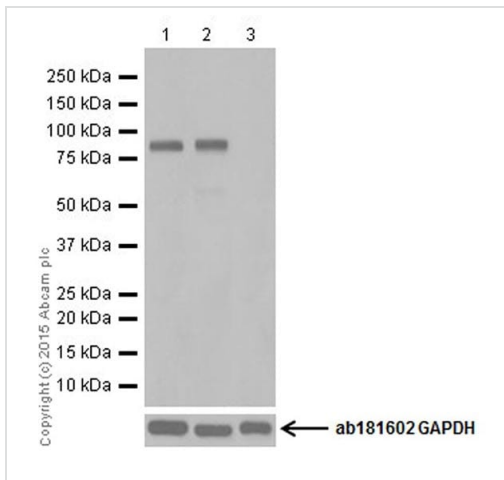
All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 83 kDa

Observed band size: 83 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-PROX1 antibody [EPR19273]
(ab199359)

All lanes : Anti-PROX1 antibody [EPR19273] (ab199359) at 1/1000 dilution

Lane 1 : SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

Lane 2 : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lane 3 : HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

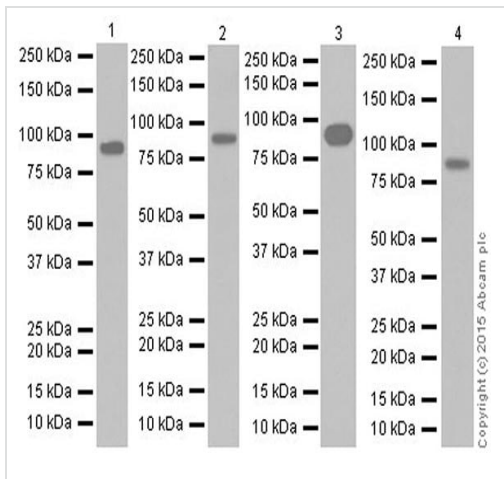
Predicted band size: 83 kDa

Observed band size: 83 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

HEK-293 doesn't express PROX1. PMID:18948102.



Western blot - Anti-PROX1 antibody [EPR19273] (ab199359)

All lanes : Anti-PROX1 antibody [EPR19273] (ab199359) at 1/1000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Rat brain lysate

Lane 3 : Mouse hippocampus lysate

Lane 4 : Rat hippocampus lysate

Lysates/proteins at 10 µg per lane.

Secondary

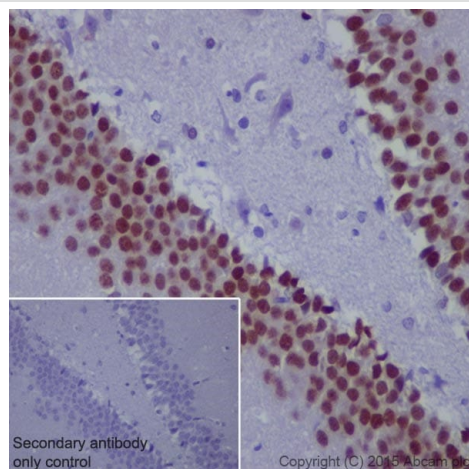
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 83 kDa

Observed band size: 83 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time : Lane 1,2 and 3: minutes; Lane 4: 5 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PROX1 antibody [EPR19273] (ab199359)

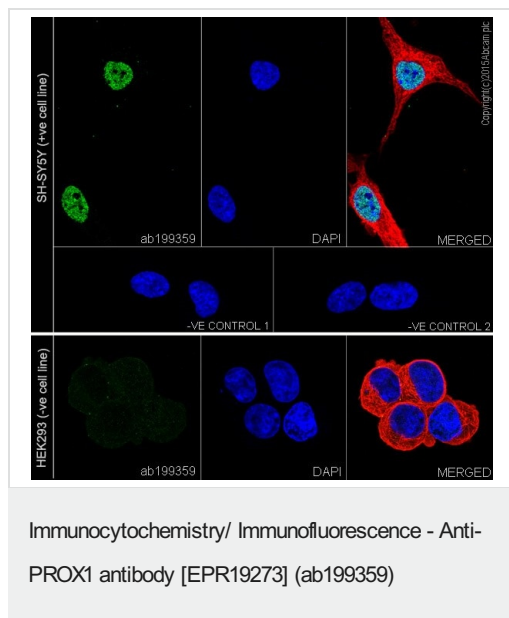
Immunohistochemical analysis of paraffin-embedded rat hippocampus tissue labeling PROX1 with ab199359 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Nucleus staining on neurons of rat hippocampus is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SH-SY5Y (Human neuroblastoma cell line from bone marrow) and HEK-293 (Human epithelial cell line from embryonic kidney) cells labeling PROX1 with ab199359 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear staining on SH-SY5Y cell line.

Negative expression in HEK-293 cells. HEK-293 doesn't express PROX1. PMID:18948102.

The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody - Loading Control (**ab7291**) at 1/1000 dilution and Goat Anti-Mouse IgG (AlexaFluor®594) preadsorbed (**ab150120**) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab199359 at 1/500 dilution followed by **ab150120** at 1/1000 dilution.

-ve control 2: **ab7291** at 1/1000 dilution followed by **ab150077** at 1/1000 dilution.

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

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Anti-PROX1 antibody [EPR19273] (ab199359)

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