abcam

Product datasheet

Anti-Lhx2/LH2 antibody [EPR20449] - BSA and Azide free ab236037



11 Images

Overview

Product name Anti-Lhx2/LH2 antibody [EPR20449] - BSA and Azide free

Description Rabbit monoclonal [EPR20449] to Lhx2/LH2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IHC-Fr, IP, IHC-P, WB **Species reactivity** Reacts with: Mouse, Rat, Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control IHC-P: Mouse olfactory epithelium tissue.

General notes ab236037 is the carrier-free version of ab184337.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR20449

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab236037 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		Use at an assay dependent concentration. Antigen retrieval: Heated citrate solution (10mM citrate pH 6.0 + 0.05% Tween-20).
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 47 kDa (predicted molecular weight: 44 kDa).

Target

Function Acts as a transcriptional activator. Stimulates the promoter of the alpha-glycoprotein gene.

Transcriptional regulatory protein involved in the control of cell differentiation in developing

lymphoid and neural cell types.

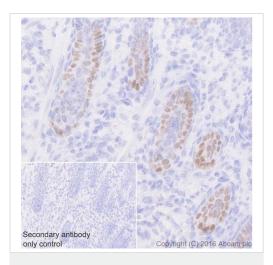
Sequence similarities Contains 1 homeobox DNA-binding domain.

Contains 2 LIM zinc-binding domains.

Domain LIM domains are necessary for transcription activation.

Cellular localization Nucleus.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lhx2/LH2 antibody
[EPR20449] - BSA and Azide free (ab236037)

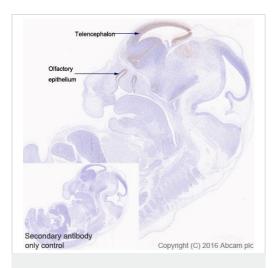
Immunohistochemical analysis of paraffin-embedded nose skin of P0 mouse labeling Lhx2/LH2 with **ab184337** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear staining on hair follicle of mouse nose skin [PMID: 20386748].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab184337</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lhx2/LH2 antibody
[EPR20449] - BSA and Azide free (ab236037)

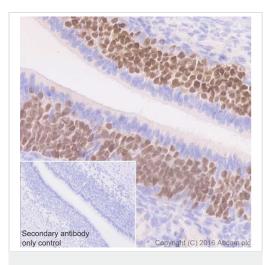
Immunohistochemical analysis of paraffin-embedded Mouse E14.5 labeling Lhx2/LH2 with <u>ab184337</u> at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear staining on telencephalon and olfactory epithelium of mouse E14.5 [PMID: 25071464].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab184337</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lhx2/LH2 antibody
[EPR20449] - BSA and Azide free (ab236037)

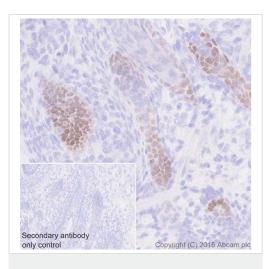
Immunohistochemical analysis of paraffin-embedded rat olfactory epithelium tissue labeling Lhx2/LH2 with <u>ab184337</u> at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear staining on rat olfactory epithelium [PMID: 15456728].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184337).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lhx2/LH2 antibody
[EPR20449] - BSA and Azide free (ab236037)

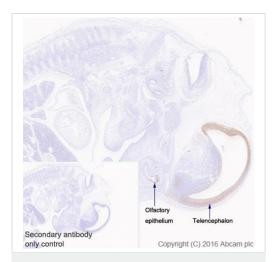
Immunohistochemical analysis of paraffin-embedded nose skin of P0 rat labeling Lhx2/LH2 with <u>ab184337</u> at 1/500 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) Ready to use. Nuclear staining on hair follicle of rat nose skin [PMID: 20386748].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab184337</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lhx2/LH2 antibody
[EPR20449] - BSA and Azide free (ab236037)

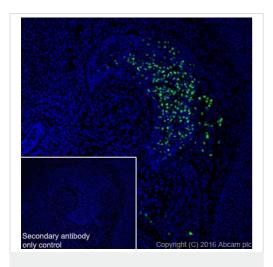
Immunohistochemical analysis of paraffin-embedded Rat E14.5 labeling Lhx2/LH2 with <u>ab184337</u> at 1/500 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) Ready to use. Nuclear staining on telencephalon and olfactory epithelium of rat E14.5 [PMID: 25071464].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab184337</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



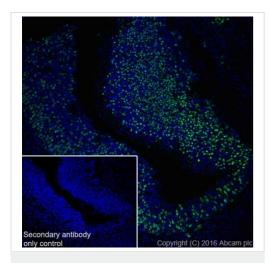
Immunohistochemistry (Frozen sections) - Anti-Lhx2/LH2 antibody [EPR20449] - BSA and Azide free (ab236037)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse E14.5 labeling Lhx2/LH2 with <u>ab184337</u> at 1/500 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor[®] 488) (<u>ab150077</u>) secondary antibody at 1/1000 dilution (green). Nuclear staining on vomeronasal organ of mouse E14.5 [PMID: 27521061].

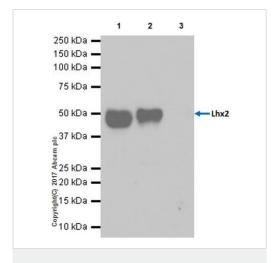
The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit lgG (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab184337</u>).



Immunohistochemistry (Frozen sections) - Anti-Lhx2/LH2 antibody [EPR20449] - BSA and Azide free (ab236037)



Immunoprecipitation - Anti-Lhx2/LH2 antibody [EPR20449] - BSA and Azide free (ab236037)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen rat E14.5 labeling Lhx2/LH2 with **ab184337** at 1/500 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor[®] 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Nuclear staining on olfactory epithelium of rat E14.5 [PMID: 15456728].

The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit lgG (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab184337</u>).

Lhx2/LH2 was immunoprecipitated from 0.35 mg of E18 rat brain lysate with <u>ab184337</u> at 1/30 dilution. Western blot was performed from the immunoprecipitate using <u>ab184337</u> at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/1000 dilution.

Lane 1: E18 rat brain lysate, 10 µg (Input).

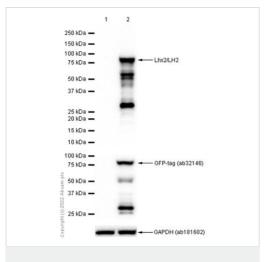
Lane 2: ab184337 IP in E18 rat brain lysate.

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab184337</u> in E18 rat brain lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184337).



Western blot - Anti-Lhx2/LH2 antibody [EPR20449] - BSA and Azide free (ab236037)

All lanes : Anti-Lhx2/LH2 antibody [EPR20449] (<u>ab184337</u>) at 1/1000 dilution

Lane 1 : 293T (Human embryonic kidney epithelial cell) whole cell lysate at 20 µg

Lane 2: 293T transfected with human Lhx2/LH2 (WT) expression vector containing a GFP-tag, whole cell lysate at 1/20 dilution

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 44 kDa **Observed band size:** 80 kDa

Exposure time: 3 seconds

Blocking buffer and concentration: 5% NFDM/TBST **Diluting buffer and concentration**: 5% NFDM/TBST

This data was developed using <u>ab184337</u>, the same antibody clone in a different buffer formulation.

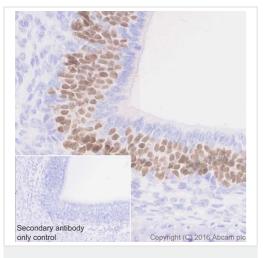
Immunohistochemical analysis of paraffin-embedded mouse olfactory epithelium tissue labeling Lhx2/LH2 with <u>ab184337</u> at 1/500 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) Ready to use. Nuclear staining on mouse olfactory epithelium [PMID: 15456728].

Counter stained with Hematoxylin.

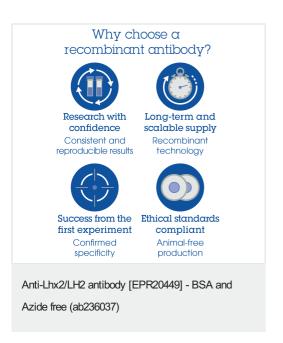
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab184337</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lhx2/LH2 antibody
[EPR20449] - BSA and Azide free (ab236037)



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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors