abcam

Product datasheet

Anti-PITX2/RGS antibody [EPR22417] ab221142

Recombinant RabMAb

1 References 6 Images

Overview

Product name	Anti-PITX2/RGS antibody [EPR22417]
Description	Rabbit monoclonal [EPR22417] to PITX2/RGS
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB **Unsuitable for:** IHC-Fr or IP
Species reactivity	**Reacts with:** Mouse, Rat
Immunogen	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse and rat pituitary and skeletal muscle tissue lysate. IHC-P: Mouse and rat pituitary gland tissue.
General notes	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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22417

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab221142 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-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 35 kDa.

Application notes Is unsuitable for IHC-Fr or IP.

Target

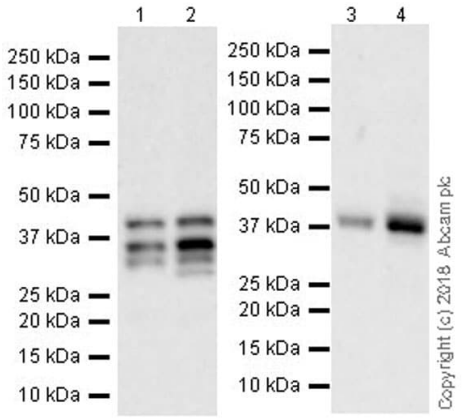
Function May play an important role in development and maintenance of anterior structures. Isoform PTX2C is involved in left-right asymmetry the developing embryo.

Involvement in disease Defects in PITX2 are the cause of Axenfeld-Rieger syndrome type 1 (RIEG1) [MIM:180500]; also known as Rieger syndrome type 1. RIEG1 is an autosomal dominant defect characterized by hypodontia (partial anodontia), anal stenosis, hypertelorism, mental deficiency, agenesis of the facial bones, with malformation of the anterior chamber of the eye.
Defects in PITX2 are the cause of iridogoniodysgenesis type 2 (IRID2) [MIM:137600]; also known as iridogoniodysgenesis syndrome 2 (IGDS2). It is an autosomal dominant inherited disease.
Defects in PITX2 are a cause of Peters anomaly (PAN) [MIM:604229]. It is a congenital defect of the anterior chamber of the eye.
Defects in PITX2 are associated with ring dermoid of cornea (RDC) [MIM:180550]. RDC is an autosomal dominantly inherited syndrome characterized by bilateral annular limbal dermoids with corneal and conjunctival extension.

Sequence similarities Belongs to the paired homeobox family. Bicoid subfamily.
Contains 1 homeobox DNA-binding domain.

Cellular localization Nucleus.

Images



Western blot - Anti-PITX2/RGS antibody [EPR22417] (ab221142)

All lanes : Anti-PITX2/RGS antibody [EPR22417] (ab221142) at 1/1000 dilution

Lane 1 : Mouse pituitary gland tissue
Lane 2 : Rat pituitary gland tissue
Lane 3 : Mouse skeletal Muscle tissue lysate
Lane 4 : Rat skeletal muscle tissue lysate

Lysates/proteins at 20 µg per lane.

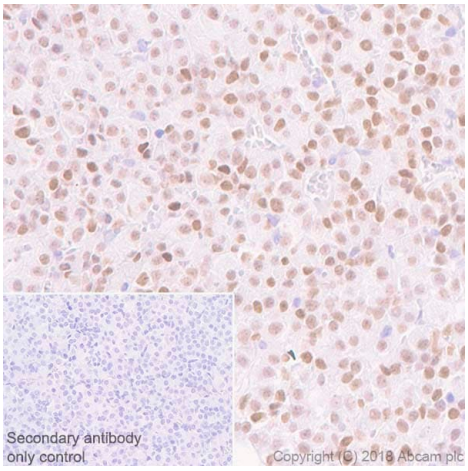
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 35 kDa
Observed band size: 30-38 kDa

Exposure time: 3 minutes

Blovking/Diluting buffer and concentration: 5% NFDM/TBST

These multiple bands observed in pituitary represent different PITX2/RGS isoforms (PITX2A, PITX2B, PITX2C, PITX2D).

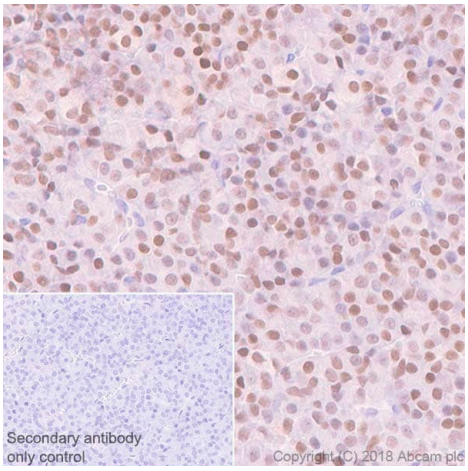


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PITX2/RGS antibody [EPR22417] (ab221142)

Immunohistochemical analysis of paraffin-embedded mouse pituitary gland tissue labeling PITX2/RGS with ab221142 at 1/2000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Nuclear staining on mouse pituitary (PMID: 15761027, PMID: 16859901, PMID: 11807026) is observed. Counterstained with Hematoxylin.

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

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PITX2/RGS antibody [EPR22417] (ab221142)

Immunohistochemical analysis of paraffin-embedded rat pituitary gland tissue labeling PITX2/RGS with ab221142 at 1/2000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Nuclear staining on rat pituitary (PMID: 15761027, PMID: 16859901, PMID: 11807026) is observed. Counterstained with Hematoxylin.

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

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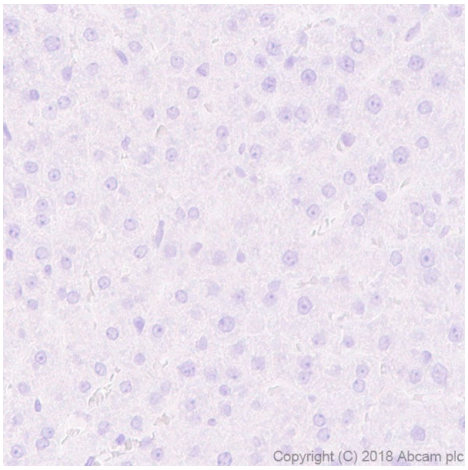


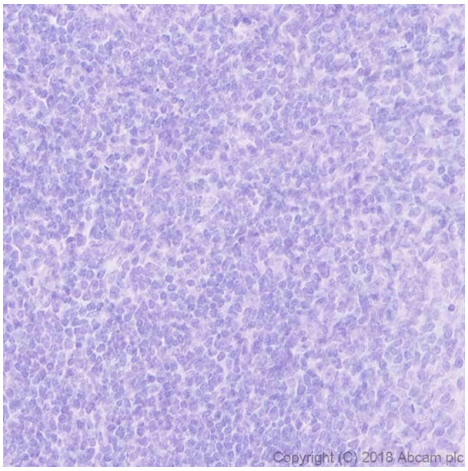
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PITX2/RGS antibody [EPR22417] (ab221142)

Negative control.

Immunohistochemical analysis of paraffin-embedded rat liver tissue labeling PITX2/RGS with ab221142 at 1/2000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Negative control, no staining on rat liver (PMID: 11157981) is observed. Counterstained with Hematoxylin.

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

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



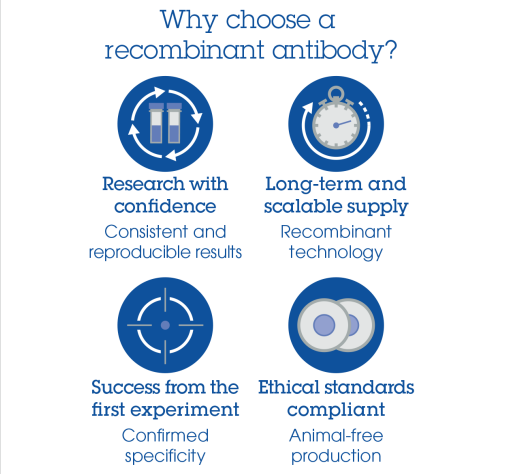
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PITX2/RGS antibody [EPR22417] (ab221142)

Negative control.

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling PITX2/RGS with ab221142 at 1/2000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Negative control, no staining on mouse spleen (PMID: 11157981) is observed. Counterstained with Hematoxylin.

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

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



Anti-PITX2/RGS antibody [EPR22417] (ab221142)

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