

## Product datasheet

# Anti-PITX2/RGS antibody [EPR22417] ab221142

Recombinant RabMAb

6 Images

### Overview

<b>Product name</b>	Anti-PITX2/RGS antibody [EPR22417]
<b>Description</b>	Rabbit monoclonal [EPR22417] to PITX2/RGS
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB <b>Unsuitable for:</b> IHC-Fr or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat
<b>Immunogen</b>	Recombinant full length protein within Human PITX2/RGS aa 1 to the C-terminus. The exact sequence is proprietary. Database link: <a href="#">Q99697</a>
<b>Positive control</b>	WB: Mouse and rat pituitary and skeletal muscle tissue lysate. IHC-P: Mouse and rat pituitary gland tissue.
<b>General notes</b>	This product was previously labelled as PITX2

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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise<sup>™</sup> guarantee.

In preparation for this, we have started to update the applications & species that this product is



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.

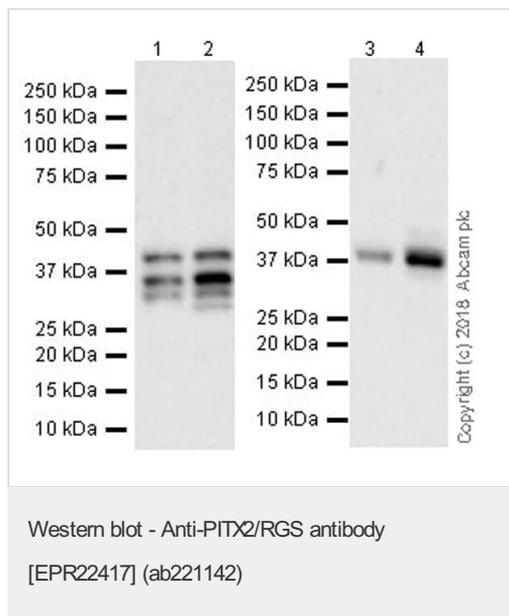
### Sequence similarities

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

### Cellular localization

Nucleus.

### Images



**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

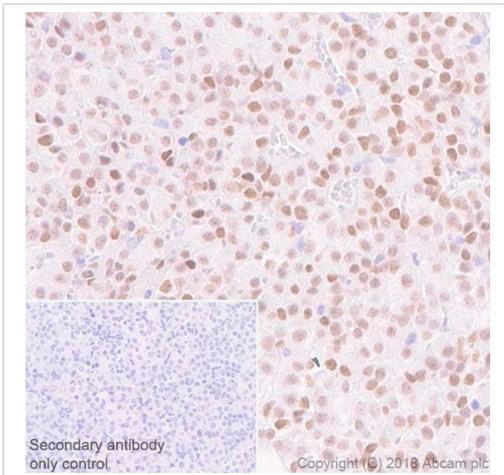
**Observed band size:** 30-38 kDa

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

**Exposure time:** 3 minutes

Blotting/Diluting buffer and concentration: 5% NFDm/TBST

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

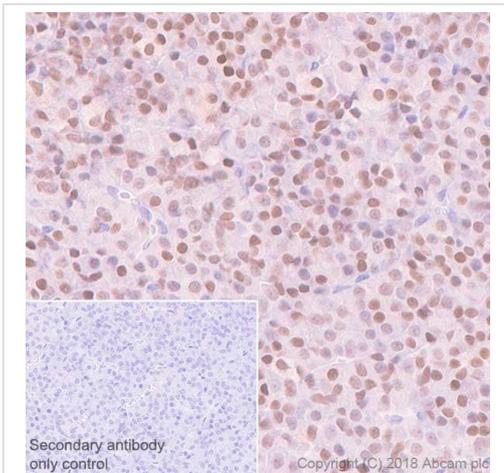


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PITX2/RGS antibody [EPR22417] (ab221142)

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.

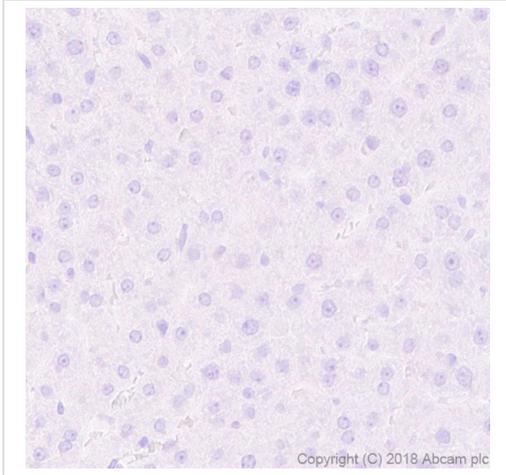


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PITX2/RGS antibody [EPR22417] (ab221142)

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).

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



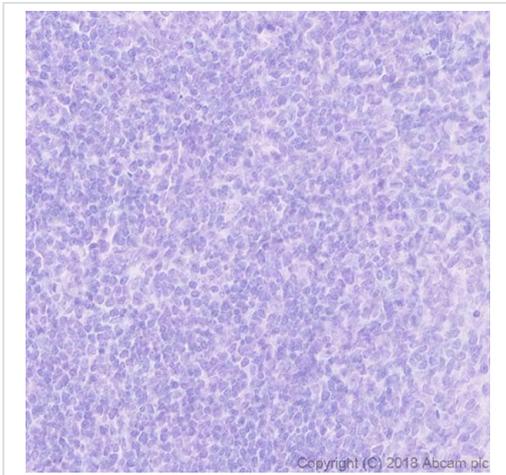
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PITX2/RGS antibody [EPR22417] (ab221142)

#### **Negative control.**

Immunohistochemical analysis of paraffin-embedded 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.

### 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



**Ethical standards compliant**  
Animal-free production

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

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

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- 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

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