

Product datasheet

Anti-nkx6.1 antibody [EPR20405] ab221549

Recombinant RabMAb

[2 References](#) [8 Images](#)

Overview

Product name	Anti-nkx6.1 antibody [EPR20405]
Description	Rabbit monoclonal [EPR20405] to nkx6.1
Host species	Rabbit
Tested applications	Suitable for: IHC-Fr, WB, IHC-P
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant fragment within Human nkx6.1 aa 1-250. The exact sequence is proprietary. Database link: P78426
Positive control	WB: Human fetal pancreas lysate. Beta-TC-6 whole cell lysate. IHC-P: Human pancreas and pancreatic neuroendocrine neoplasm tissues; Mouse pancreas tissue. IHC-Fr: Mouse pancreas tissue.
General notes	<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> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>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[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.</p>

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

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, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20405
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab221549** 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		1/100.
WB		1/1000. Detects a band of approximately 38 kDa (predicted molecular weight: 38 kDa). Under our testing conditions we used a high sensitivity exposure system to obtain this result. Customers are recommended to optimize WB testing conditions.
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

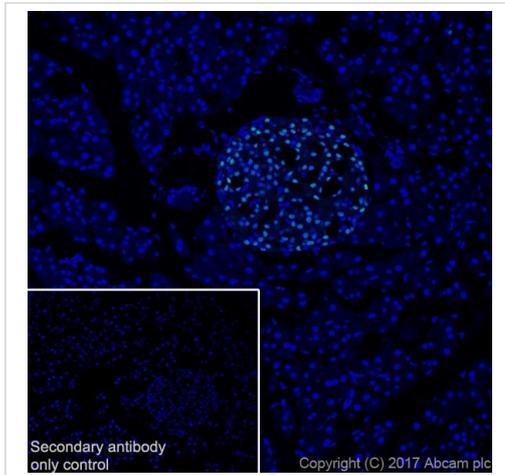
Function	Transcription factor which binds to specific A/T-rich DNA sequences in the promoter regions of a number of genes. Involved in transcriptional regulation in islet beta cells. Binds to the insulin promoter and is involved in regulation of the insulin gene. Together with NKX2-2 and IRX3 acts to restrict the generation of motor neurons to the appropriate region of the neural tube. Belongs to the class II proteins of neuronal progenitor factors, which are induced by SHH signals.
Tissue specificity	Pancreatic beta cells.
Sequence similarities	Contains 1 homeobox DNA-binding domain.

Domain

The C-terminal domain contributes to sequence-specific DNA-binding.

Cellular localization

Nucleus.

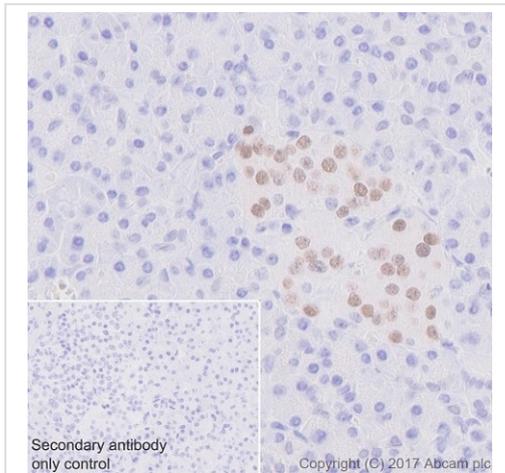
Images

Immunohistochemistry (Frozen sections) - Anti-nkx6.1 antibody [EPR20405] (ab221549)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse pancreas tissue labeling nkx6.1 with ab221549 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green). Nuclear staining on islet of mouse pancreas is observed.

The nuclear counterstain is DAPI (blue).

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

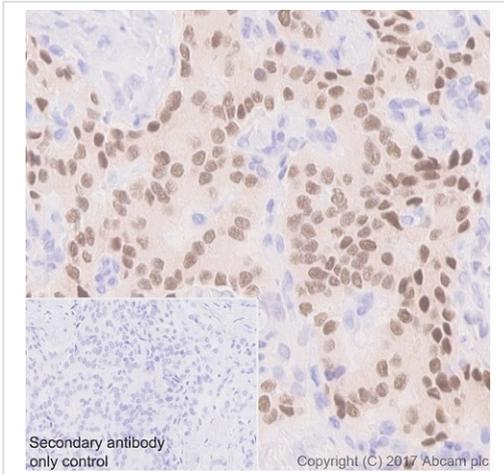


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-nkx6.1 antibody [EPR20405] (ab221549)

Immunohistochemical analysis of paraffin-embedded human pancreas tissue labeling nkx6.1 with ab221549 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear staining on islet of human pancreas (PMID: 8702531). 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.

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

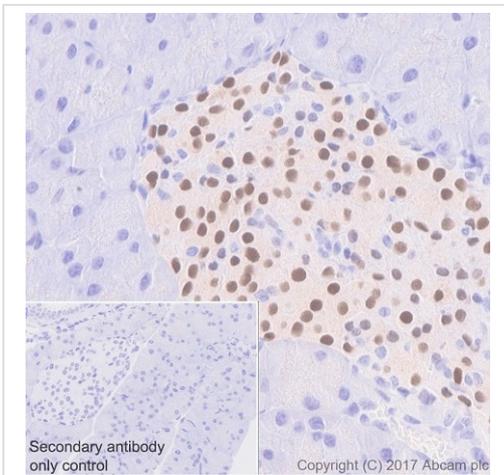


Immunohistochemical analysis of paraffin-embedded human pancreatic neuroendocrine neoplasm tissue labeling nkx6.1 with ab221549 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Mainly nuclear staining on tumor cells of human pancreatic neuroendocrine neoplasm (PMID: 25871618). 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.

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-nkx6.1 antibody [EPR20405] (ab221549)

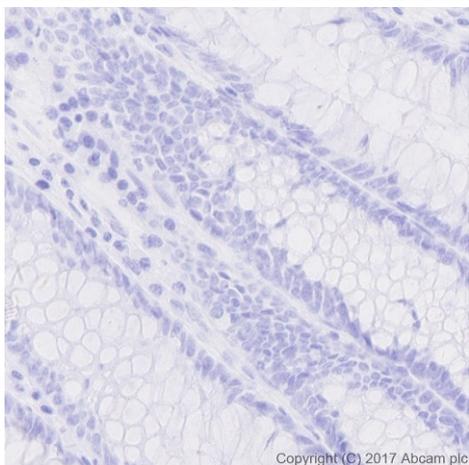


Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue labeling nkx6.1 with ab221549 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear staining on islet of mouse pancreas (PMID: 8702531). Counter stained with hematoxylin.

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

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-nkx6.1 antibody [EPR20405] (ab221549)

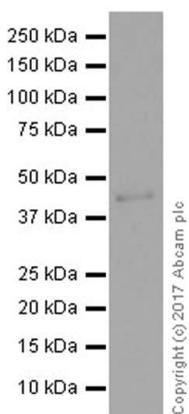


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-nkx6.1 antibody [EPR20405] (ab221549)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling nkx6.1 with ab221549 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Negative control: no staining on human colon (PMID: 25871618). Counter stained with hematoxylin.

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



Western blot - Anti-nkx6.1 antibody [EPR20405] (ab221549)

Anti-nkx6.1 antibody [EPR20405] (ab221549) at 1/1000 dilution + Human fetal pancreas lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Developed using the ECL technique.

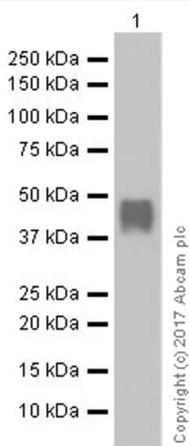
Predicted band size: 38 kDa

Observed band size: 38 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.

Under our testing conditions we used a high sensitivity exposure system to obtain this result. Customers are recommended to optimize WB testing conditions.



Western blot - Anti-nkx6.1 antibody [EPR20405] (ab221549)

Anti-nkx6.1 antibody [EPR20405] (ab221549) at 1/1000 dilution + Beta-TC-6 (mouse pancreas insulinoma beta cell) whole cell lysate at 10 µg

Secondary

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

Predicted band size: 38 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST

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-nkx6.1 antibody [EPR20405] (ab221549)

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

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