**Product datasheet**

**Anti-nkx6.1 antibody [EPR20328] ab221544**

7 Images

**Overview**

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Anti-nkx6.1 antibody [EPR20328]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Rabbit monoclonal [EPR20328] to nkx6.1</td>
</tr>
<tr>
<td><strong>Host species</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Tested applications</strong></td>
<td>Suitable for: WB, IHC-P</td>
</tr>
<tr>
<td><strong>Species reactivity</strong></td>
<td>Reacts with: Mouse, Rat, Human</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Synthetic peptide within Human nkx6.1 aa 200-300. The exact sequence is proprietary. Database link: P78426</td>
</tr>
<tr>
<td><strong>General notes</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

**Properties**

<table>
<thead>
<tr>
<th><strong>Form</strong></th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage instructions</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Storage buffer</strong></td>
<td>Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Protein A purified</td>
</tr>
<tr>
<td><strong>Clonality</strong></td>
<td>Monoclonal</td>
</tr>
<tr>
<td><strong>Clone number</strong></td>
<td>EPR20328</td>
</tr>
</tbody>
</table>
**Isotype**

IgG

**Applications**

Our Abpromise guarantee covers the use of ab221544 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td></td>
<td>1/1000. Predicted molecular weight: 38 kDa. Detection of endogenous expression of nkx6.1 in WB will require optimization. Under our experimental conditions we only detected weak endogenous expression in mouse lysates.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>1/200. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
</tr>
</tbody>
</table>

**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**
Immunohistochemical analysis of paraffin-embedded human pancreas tissue labeling nkx6.1 with ab221544 at 1/200 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.


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 mouse pancreas tissue labeling nkx6.1 with ab221544 at 1/200 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.

Immunohistochemical analysis of paraffin-embedded rat pancreas tissue labeling nkx6.1 with ab221544 at 1/200 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear staining on rat 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 colon tissue labeling nkx6.1 with ab221544 at 1/200 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.

Anti-nkx6.1 antibody [EPR20328] (ab221544) at 1/1000 dilution + Human nkx6.1 recombinant protein (aa (1-48) & aa(66-120) & aa(179-240) with a His-tag) at 0.01 µg

**Secondary**

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

Developed using the ECL technique.

**Predicted band size:** 38 kDa

**Observed band size:** 40 kDa

*why is the actual band size different from the predicted?*

**Exposure time:** 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

Human nkx6.1 recombinant protein contains aa(1-48) & aa(66-120) & aa(179-240) with a His-tag.
Anti-nkx6.1 antibody [EPR20328] (ab221544) at 1/200 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  
**Observed band size:** 38 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

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

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