Product datasheet

Anti-IGF1 antibody ab9572

Overview

Product name | Anti-IGF1 antibody
Description | Rabbit polyclonal to IGF1
Host species | Rabbit
Tested applications | Suitable for: IHC-P, WB, Neutralising, IHC-FoFr, ICC/IF, Sandwich ELISA
Species reactivity | Reacts with: Mouse, Human
Immunogen | Highly pure (>98%) recombinant hIGF-1 (human Insulin Like Growth Factor-1).
Positive control | Recombinant human IGF1 protein (ab9573) can be used as a positive control in WB.

Properties

Form | Lyophilised: Reconstitute with 200µl of sterile water. Please note that if you receive this product in liquid form it has already been reconstituted as described and no further reconstitution is necessary.
Storage buffer | PBS, pH 7.4, no preservative, sterile filtered
Purity | Immunogen affinity purified
Clonality | Polyclonal
Isotype | IgG
Light chain type | unknown

Applications

Our Abpromise guarantee covers the use of ab9572 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>IHC-P</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use a concentration of 4 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.</td>
</tr>
</tbody>
</table>
### Function

The insulin-like growth factors, isolated from plasma, are structurally and functionally related to insulin but have a much higher growth-promoting activity. May be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. Stimulates glucose transport in rat bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also with regard to enhancing glucose uptake.

### Involvement in disease

Defects in IGF1 are the cause of insulin-like growth factor I deficiency (IGF1 deficiency) [MIM:608747]. IGF1 deficiency is an autosomal recessive disorder characterized by growth retardation, sensorineural deafness and mental retardation.

### Sequence similarities

Belongs to the insulin family.

### Cellular localization

Secreted.

### Form

There are 2 isoforms produced by alternative splicing. Isoform 1 also known as: IGF-IB; Isoform 2 also known as: IGF-IA.

### Application

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<td>WB</td>
<td></td>
<td>Use at an assay dependent concentration. To detect hIGF-1 by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant hIGF-1 is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.</td>
</tr>
<tr>
<td>Neutralising</td>
<td></td>
<td>Use at an assay dependent concentration. To yield one-half maximal inhibition of the biological activity of hIGF-1 (5.0 ng/ml), a concentration of 0.67 - 1.0 ug/ml of this antibody is required.</td>
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<td>IHC-FoFr</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 28754163</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>1/200.</td>
</tr>
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<td>Sandwich ELISA</td>
<td></td>
<td>Use a concentration of 0.5 - 2 µg/ml. Can be paired for Sandwich ELISA with Rabbit polyclonal to IGF1 (Biotin) (ab83137). Allows for the detection of at least 0.2 - 0.4 ng/well of recombinant IGF1.</td>
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#### Target

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**Western blot** - Anti-IGF1 antibody (ab9572)

This image is courtesy of an anonymous Abreview

All lanes: Anti-IGF1 antibody (ab9572) at 1/2000 dilution

All lanes: Human vascular smooth muscle whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Donkey Anti-Rabbit IgG - HRP at 1/10000 dilution

Developed using the ECL technique.

Ab9572 staining Human normal liver parenchyma. Staining is localised to the cytoplasm.

Left panel: with primary antibody at 4 ug/ml. Right panel: isotype control.

Sections were stained using an automated system DAKO Autostainer Plus, at room temperature: sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffer EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX.

Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

ab9572 staining IGF1 in mouse heart tissue sections by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Tissue was fixed with 10% formalin and blocked with 10% serum for 30 minutes at 25°C; antigen retrieval was by heat mediation. Samples were incubated with primary antibody (1/1000 in 10% goat serum) for 24 hours at 4°C. An Alexa Fluor® 594-conjugated goat anti-rabbit IgG polyclonal (1/400) was used as the secondary antibody.
Immunocytochemistry/ Immunofluorescence - Anti-IGF1 antibody (ab9572)

This image is courtesy of an anonymous Abreview.

Sandwich ELISA - Anti-IGF1 antibody (ab9572)

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