Product datasheet

Anti-Glucocorticoid Receptor antibody ab3671

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Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-Glucocorticoid Receptor antibody</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit polyclonal to Glucocorticoid Receptor</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Specificity</td>
<td>This antibody detects both the unactivated and activated forms of GR.</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: IHC-P, ICC/IF, WB</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Mouse, Human, Snake</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide corresponding to Human Glucocorticoid Receptor aa 150-175.</td>
</tr>
<tr>
<td></td>
<td>Sequence: APTEKEFPKTHSDVESQHKGQTG</td>
</tr>
</tbody>
</table>

General notes

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™ guarantee.

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

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.

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 or -80°C. Avoid freeze / thaw cycle.

Storage buffer
Preservative: 0.05% Sodium azide
Constituent: 99% PBS

Purity
Whole antiserum

Clonality
Polyclonal

Isotype
IgG

Applications

Our Abpromise guarantee covers the use of ab3671 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>1/250.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td>★★★★★☆☆☆</td>
<td>1/250.</td>
</tr>
<tr>
<td>WB</td>
<td>★★★★★☆☆☆</td>
<td>1/500 - 1/2500. Detects a band of approximately 97 kDa (predicted molecular weight: 86 kDa).</td>
</tr>
</tbody>
</table>

Target

Function
Receptor for glucocorticoids (GC). Has a dual mode of action: as a transcription factor that binds to glucocorticoid response elements (GRE) and as a modulator of other transcription factors. Affects inflammatory responses, cellular proliferation and differentiation in target tissues. Could act as a coactivator for STAT5-dependent transcription upon growth hormone (GH) stimulation and could reveal an essential role of hepatic GR in the control of body growth. Involved in chromatin remodeling. Plays a significant role in transactivation. Involved in nuclear translocation.

Tissue specificity
Widely expressed. In the heart, detected in left and right atria, left and right ventricles, aorta, apex, intraventricular septum, and atrioventricular node as well as whole adult and fetal heart.

Involvement in disease
Defects in NR3C1 are a cause of glucocorticoid resistance (GCRES) [MIM:138040]; also known as cortisol resistance. It is a hypertensive, hyperandrogenic disorder characterized by increased serum cortisol concentrations. Inheritance is autosomal dominant.

Sequence similarities
Belongs to the nuclear hormone receptor family. NR3 subfamily. Contains 1 nuclear receptor DNA-binding domain.

Domain
Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.

Post-translational modifications
Increased proteasome-mediated degradation in response to glucocorticoids. Phosphorylated in the absence of hormone; becomes hyperphosphorylated in the presence of glucocorticoid. The Ser-203-phosphorylated form is mainly cytoplasmic, and the Ser-211-phosphorylated form is nuclear. Transcriptional activity correlates with the amount of phosphorylation at Ser-211. Sumoylated; this reduces transcription transactivation. Ubiquitinated; restricts glucocorticoid-mediated transcriptional signaling.
Cellular localization


Images

**Western blot** - Anti-Glucocorticoid Receptor antibody (ab3671)

- **All lanes**: Anti-Glucocorticoid Receptor antibody (ab3671) at 1/1000 dilution
- **Lane 1**: A549 (human lung carcinoma cell line) membrane enriched extract
- **Lane 2**: MCF7 (human breast adenocarcinoma cell line) membrane enriched extract
- **Lane 3**: T-47D membrane enriched extract
- **Lane 4**: MDA-MB-231 (human breast adenocarcinoma cell line) membrane enriched extract
- **Lane 5**: HeLa (human epithelial cell line from cervix adenocarcinoma) membrane enriched extract
- **Lane 6**: Mouse brain tissue extract

Lysates/proteins at 30 µg per lane.

**Predicted band size**: 86 kDa

Immunocytochemistry/Immunofluorescence analysis of HEK-293 (Human epithelial cell line from embryonic kidney) cells labeling Glucocorticoid Receptor (green) with ab3671 at 1/100. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue). Cells were fixed with formaldehyde and incubated with the primary antibody overnight at 4°C. A DyLight 488-conjugated secondary antibody was used. 60X magnification. Right - negative control.
Immunocytochemistry/Immunofluorescence analysis of A2058 (Human metastatic melanoma cell line) cells labeling Glucocorticoid Receptor (green) with ab3671 at 1/100. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue). Cells were fixed with formaldehyde and incubated with the primary antibody overnight at 4°C. A DyLight 488-conjugated secondary antibody was used. 60X magnification. Right - negative control.

Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial adenocarcinoma cell line) cells labeling Glucocorticoid Receptor (green) with ab3671 at 1/100. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue). Cells were fixed with formaldehyde and incubated with the primary antibody overnight at 4°C. A DyLight 488-conjugated secondary antibody was used. 60X magnification. Right - negative control.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Thamnophis sirtalis (Common garter snake) brain tissue sections labeling Glucocorticoid Receptor with ab3671 at 1/250. Samples were blocked with 10% goat serum in 0.1M PBS. Samples were incubated with the primary antibody for 48 hours at 4°C. A biotin-conjugated goat anti-rabbit was used as the secondary antibody.

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

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