

Product datasheet

Anti-Glucocorticoid Receptor antibody ab225886

4 Images

Overview

Product name	Anti-Glucocorticoid Receptor antibody
Description	Rabbit polyclonal to Glucocorticoid Receptor
Host species	Rabbit
Tested applications	Suitable for: WB, IP, IHC-P, ChIP-sequencing
Species reactivity	Reacts with: Human Predicted to work with: Sheep 
Immunogen	Synthetic peptide within Human Glucocorticoid Receptor aa 150-200. The exact sequence is proprietary. (NP_000167.1). Database link: P04150
Positive control	WB: HeLa and HEK-293T whole cell lysates. IP: HeLa whole cell lysate (ab150035). IHC-P: Human lung carcinoma tissue. ChIPseq: Prednisolone-treated THP-1 cells.
General notes	<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> <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.</p> <p>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.</p>

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: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
Purity	Immunogen affinity purified
Purification notes	ab225886 was affinity purified using an epitope specific to Glucocorticoid Receptor immobilized on solid support.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab225886** 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
WB		1/2000 - 1/10000. Predicted molecular weight: 86 kDa.
IP		Use at 2-10 µg/mg of lysate.
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ChIP-sequencing		Use 4 µg for 30 µg of chromatin.

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.

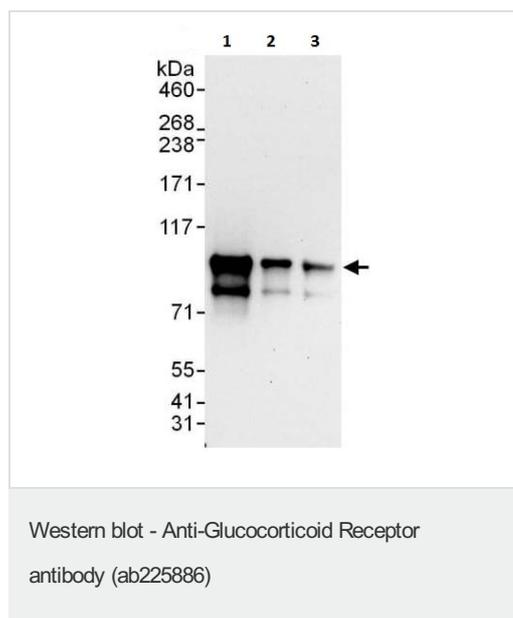
Post-translational modifications

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

Cytoplasm. Nucleus. Cytoplasmic in the absence of ligand, nuclear after ligand-binding and Nucleus. Localized largely in the nucleus.

Images



All lanes : Anti-Glucocorticoid Receptor antibody (ab225886) at 0.04 µg/ml

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 50 µg

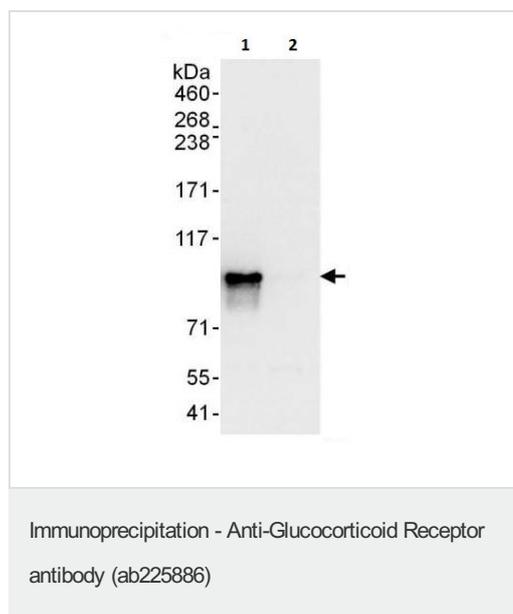
Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 15 µg

Lane 3 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 86 kDa

Exposure time: 30 seconds

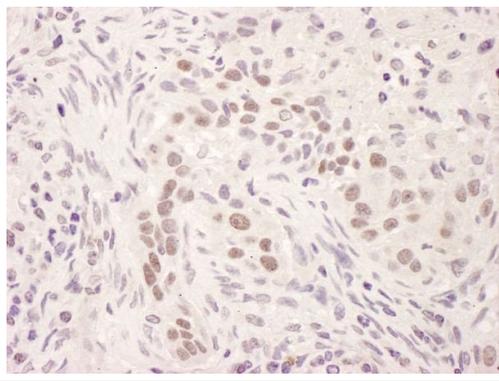


Glucocorticoid Receptor was immunoprecipitated from HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate (1 mg for IP, 20% of IP loaded) with ab225886 at 6 µg/mg lysate. Western blot was performed from the immunoprecipitate using ab225886 at 0.4 µg/ml.

Lane 1: ab225886 IP in HeLa whole cell lysate.

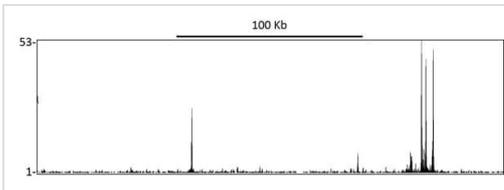
Lane 2: Control IgG IP in HeLa whole cell lysate.

Detection: Chemiluminescence with exposure time of 1 second.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucocorticoid Receptor antibody (ab225886)

Formalin-fixed, paraffin-embedded human lung carcinoma tissue stained for Glucocorticoid Receptor using ab225886 at 1/200 dilution in immunohistochemical analysis. Detection: DAB staining.



ChIP-seq - Anti-Glucocorticoid Receptor antibody (ab225886)

Chromatin from prednisolone treated THP-1 (human monocytic leukemia cell line) cells was immunoprecipitated with ab225886 and analyzed by DNA sequencing. The figure illustrates the peak distribution of Glucocorticoid Receptor binding within a 250 Kb region of chromosome 6 as detected using ab225886.

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