

Product datasheet

Anti-Glucocorticoid Receptor antibody ab3578

★★★★☆ 3 Abreviews 8 References 6 Images

Overview

Product name	Anti-Glucocorticoid Receptor antibody
Description	Rabbit polyclonal to Glucocorticoid Receptor
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P, Inhibition Assay, ChIP, IP, ICC, WB, IHC-FoFr
Species reactivity	Reacts with: Mouse, Rat, Sheep, Rabbit, Hamster, Cow, Human, Saccharomyces cerevisiae, Non human primates Predicted to work with: Guinea pig, Pig 
Immunogen	Synthetic peptide corresponding to Human Glucocorticoid Receptor aa 346-367. Sequence: DQKPIFNVIPPIPVGSENWNRC (Peptide available as ab5019)  Run BLAST with  Run BLAST with

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	Constituent: 100% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab3578** 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
ICC/IF	★★★★★	1/20.
IHC-P		1/200.
Inhibition Assay		Use at an assay dependent concentration.
ChIP		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC		Use a concentration of 1 µg/ml. Immunocytochemical staining of GR in HeLa cells results in cytoplasmic staining in the absence of ligand, and nuclear staining after hormone administration.
WB	★★★★☆	Use a concentration of 5 µg/ml. Detects a band of approximately 95 kDa (predicted molecular weight: 86 kDa). Can be blocked with Glucocorticoid Receptor peptide (ab5019) .
EMSA		Use at an assay dependent concentration.
IHC-FoFr	★★★★☆	Use at an assay dependent concentration. PubMed: 18279320

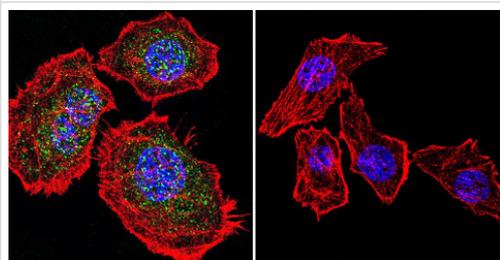
Target

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

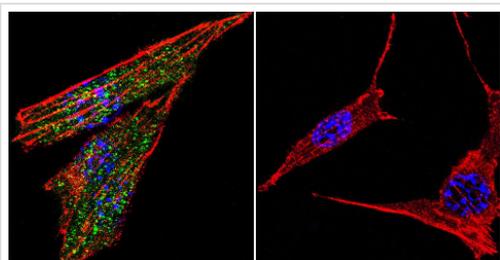
Cytoplasm. Nucleus. Cytoplasmic in the absence of ligand, nuclear after ligand-binding and Nucleus. Localized largely in the nucleus.

Images



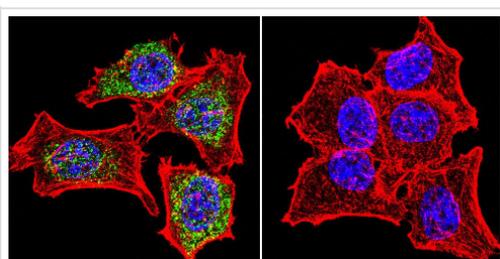
Immunocytochemistry/ Immunofluorescence - Anti-Glucocorticoid Receptor antibody - ChIP Grade (ab3578)

Immunocytochemistry/Immunofluorescence analysis of U251 cells labeling Glucocorticoid (green) with ab3578 at 1/20. 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.



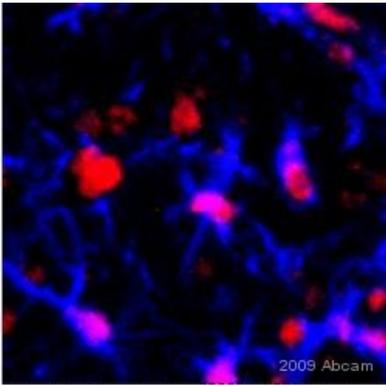
Immunocytochemistry/ Immunofluorescence - Anti-Glucocorticoid Receptor antibody - ChIP Grade (ab3578)

Immunocytochemistry/Immunofluorescence analysis of NIH-3T3 cells labeling Glucocorticoid (green) with ab3578 at 1/20. 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 - Anti-Glucocorticoid Receptor antibody - ChIP Grade (ab3578)

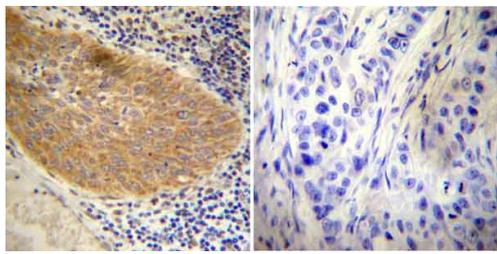
Immunocytochemistry/Immunofluorescence analysis of HeLa cells labeling Glucocorticoid (green) with ab3578 at 1/20. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue). Cells were fixed with formaldehyde and incubated with the primary antibody overnight at 4°C. A DyLight 488-conjugated secondary antibody was used. 60X magnification. Right - negative control.



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-Glucocorticoid Receptor antibody - ChIP Grade (ab3578)

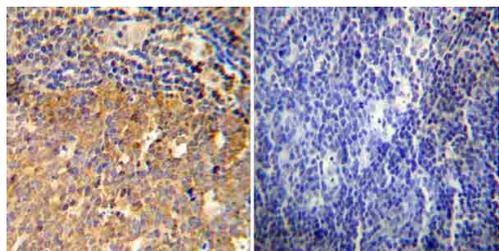
This image is courtesy of an anonymous Abreview

ab3578 staining Glucocorticoids Receptors in Mouse brain tissue section by Immunohistochemistry (PFA perfusion fixed frozen sections). Tissue underwent fixation in 4% paraformaldehyde and 15µm sections were cut using cryostat. The primary antibody was diluted, 1/100 in TNB buffer and incubated with sample for 18 hours at 4°C. A HRP conjugated goat polyclonal to rabbit IgG, diluted 1/500 was used as secondary. Red staining represents staining with ab3578 in perilesional cells.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucocorticoid Receptor antibody - ChIP Grade (ab3578)

Immunohistochemistry was performed on both normal and cancer biopsies of deparaffinized Human cervical carcinoma tissue. To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH 6.0) buffer, microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1/200 with a rabbit polyclonal antibody recognizing Glucocorticoid Receptor (ab3578) or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucocorticoid Receptor antibody - ChIP Grade (ab3578)

Immunohistochemistry was performed on both normal and cancer biopsies of deparaffinized Human tonsil tissue. To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH 6.0) buffer, microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1/200 with a rabbit polyclonal antibody recognizing Glucocorticoid Receptor (ab3578) or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors