

Product datasheet

# Anti-Glucocorticoid Receptor beta antibody ab3581

5 References 2 Images

Overview

<b>Product name</b>	Anti-Glucocorticoid Receptor beta antibody
<b>Description</b>	Rabbit polyclonal to Glucocorticoid Receptor beta
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IHC-P, Flow Cyt, ICC, IP, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Sheep, Human, Pig
<b>Immunogen</b>	Synthetic peptide corresponding to Human Glucocorticoid Receptor beta aa 728-742. Sequence: NVMWLKPESTSHTLI  (Peptide available as <a href="#">ab39765</a> )

 [Run BLAST with](#)

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Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.05% Sodium azide Constituent: 99% PBS
<b>Purity</b>	Whole antiserum
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab3581** 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
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ICC/IF		Use a concentration of 5 µg/ml. Fixation: 4% paraformaldehyde for 15 minutes at room temperature. Permeabilisation: PBS containing 0.01% saponin for 15 mins Blocking: 1% BSA in PBS Primary: overnight at 4°C
EMSA		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. PubMed: 20438742 Sample Preparation: endogenous peroxidase blocked with 0.3% hydrogen peroxide. Antigen retrieval: Heat induced antigen retrieval performed in 0.01M Tris-EDTA pH 9.0. Primary antibody: overnight at 4°C
Flow Cyt		Use at an assay dependent concentration. <a href="#">ab171870</a> - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
ICC		1/1500.
IP		Use at an assay dependent concentration. Sample preparation: RIPA buffer containing protease inhibitors was added to cell lysate. Primary antibody: 1:10 dilution for 2 h on ice Prewashed magnetic beads added to lysate mixture and incubated overnight at +4°C. After washing, sample reducing buffer was added and boiled (5 min, 95°C)
WB		1/500. Detects a band of approximately 90 kDa (predicted molecular weight: 83 kDa). Can be blocked with <a href="#">Human Glucocorticoid Receptor beta peptide (ab39765)</a> . Sample preparation: Lysates boiled in reducing buffer for 5 min. 20µg of protein loaded Blocking agent: 5% non-fat milk in Tris buffered saline (TBS) Primary antibody: overnight at 4°C

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	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.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Belongs to the nuclear hormone receptor family. NR3 subfamily. Contains 1 nuclear receptor DNA-binding domain.
<b>Domain</b>	Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.
<b>Post-translational modifications</b>	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.

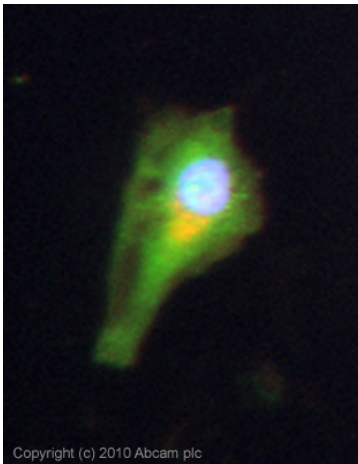
Sumoylated; this reduces transcription transactivation.

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.

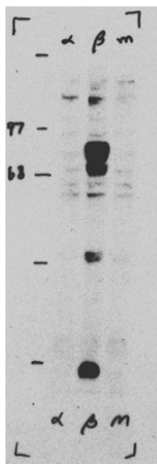
### Images



Immunocytochemistry/ Immunofluorescence - Anti-Glucocorticoid Receptor beta antibody (ab3581)

ICC/IF image of ab3581 stained HeLa cells.

The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab3581, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - Anti-Glucocorticoid Receptor beta antibody (ab3581)

Anti-Glucocorticoid Receptor beta antibody (ab3581) at 1/500 dilution + COS-74 whole cell extract transfected with Glucocorticoid Receptor beta

**Predicted band size: 83 kDa**

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

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