

Product datasheet

Anti-Glucocorticoid Receptor (phospho S226) antibody [EPR22216-414] ab228972

Recombinant RabMAb

[1 References](#) [4 Images](#)

Overview

Product name	Anti-Glucocorticoid Receptor (phospho S226) antibody [EPR22216-414]
Description	Rabbit monoclonal [EPR22216-414] to Glucocorticoid Receptor (phospho S226)
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Dot blot Unsuitable for: ChIP, Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: U-2 OS treated with 1 μ M Dexamethasone for 1hour whole cell lysate 20 μ g (Untreated membrane), cell lysate. Dot blot: Glucocorticoid Receptor (phospho S226) peptide (aa220-231) and Glucocorticoid Receptor (phospho S226) peptide (aa225-234). IHC-P: Human endometrial cancer tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</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: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR22216-414
Isotype	IgG

Applications

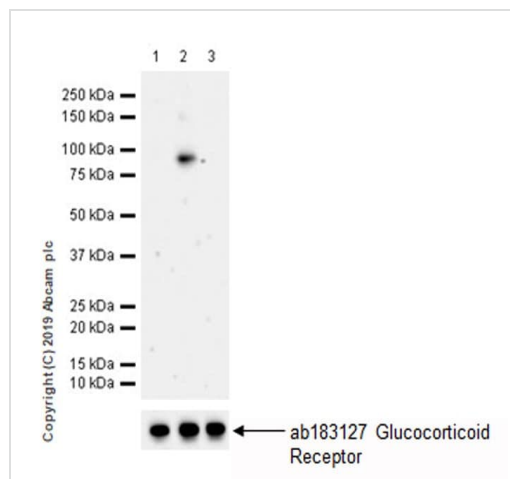
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab228972 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Predicted molecular weight: 85 kDa.
IHC-P		1/1000.
Dot blot		1/1000.

Application notes Is unsuitable for ChIP, Flow Cyt, ICC/IF or IP.

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.



Western blot - Anti-Glucocorticoid Receptor (phospho S226) antibody [EPR22216-414] (ab228972)

All lanes : Anti-Glucocorticoid Receptor (phospho S226) antibody [EPR22216-414] (ab228972) at 1/1000 dilution

Lane 1 : Untreated U-2 OS (human bone osteosarcoma epithelial cell) whole cell lysate (Untreated membrane)

Lane 2 : U-2 OS treated with 1 μM Dexamethasone for 1hour whole cell lysate 20 μg (Untreated membrane)

Lane 3 : U-2 OS treated with 1 μM Dexamethasone for 1hour whole cell lysate 20 μg (Phosphatase treated membrane)

Lysates/proteins at 20 μg per lane.

Secondary

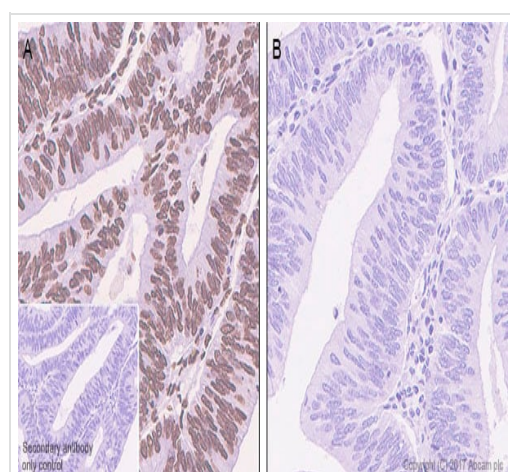
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 85 kDa

Observed band size: 86 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Glucocorticoid receptor is phosphorylated upon stimulation of dexamethasone, a corticosteroid (PMID: 28781762). Exposure time: 3 minutes

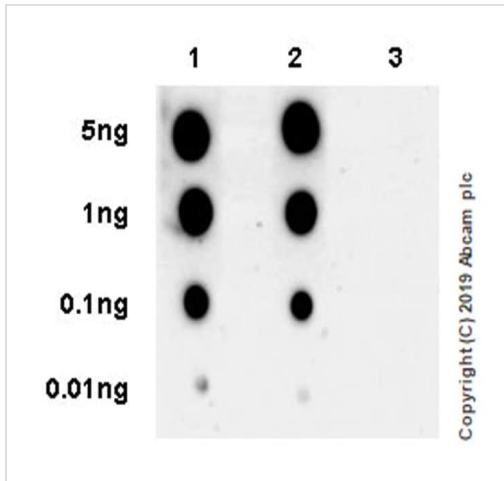


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucocorticoid Receptor (phospho S226) antibody [EPR22216-414] (ab228972)

Immunohistochemical analysis of paraffin-embedded Human endometrial cancer tissue labeling Glucocorticoid Receptor (phospho S226) with ab228972 at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Nuclear staining on human endometrium cancer (panel A), and no staining after alkaline phosphatase treatment (panel B) (PMID:12351702, 12225995). The section was incubated with ab228972 for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Dot Blot - Anti-Glucocorticoid Receptor (phospho S226) antibody [EPR22216-414] (ab228972)

Dot blot analysis using ab228972 at 1/1000 dilution. The secondary antibody was a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100,000 dilution.

Lane 1: Glucocorticoid Receptor (phospho S226) peptide (aa220-231)

Lane 2: Glucocorticoid Receptor (phospho S226) peptide (aa225-234)

Lane 3: Glucocorticoid Receptor non-phospho peptide (aa220-234)

Blocking/diluting buffer and concentration: 5% NFD/MTBST

Exposure time: 3 minutes.

Why choose a recombinant antibody?

- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

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

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