



# GR (phospho Ser211) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-03290
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	NR3C1
<b>Protein Name</b>	Glucocorticoid receptor
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human GR around the phosphorylation site of Ser211. AA range:181-230
<b>Specificity</b>	Phospho-GR (S211) Polyclonal Antibody detects endogenous levels of GR protein only when phosphorylated at S211.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	NR3C1; GRL; Glucocorticoid receptor; GR; Nuclear receptor subfamily 3 group C member 1
<b>Observed Band</b>	95kD
<b>Cell Pathway</b>	[Isoform Alpha]: Cytoplasm . Nucleus . Mitochondrion . Cytoplasm, cytoskeleton, spindle . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . After ligand activation, translocates from the cytoplasm to the nucleus. In the presence of NR1D1 shows a time-dependent subcellular localization, localizing to the cytoplasm at ZT8 and to the nucleus at ZT20 (By similarity). Lacks this diurnal pattern of localization in the absence of NR1D1, localizing to both nucleus and the cytoplasm at ZT8 and ZT20 (By similarity). . ; [Isoform Beta]: Nucleus . Cytoplasm . Expressed predominantly in the nucleus with some expression also detected in the cytoplasm. . ; [Isoform Alpha-B]: Nucleus . Cytoplasm . After ligand activation, translocates from the cytoplasm to the nucleus. .
<b>Tissue Specificity</b>	Widely expressed including bone, stomach, lung, liver, colon, breast, ovary, pancreas and kidney (PubMed:25847991). 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 (PubMed:10902803). ; [Isoform Beta]: Widely expressed including brain, bone marrow, thymus, spleen, liver, kidney, pancreas, lung, fat, skeletal muscle, heart, placenta and blood leukocytes. ; [Isoform Alpha-2]: Widely expressed.



## Function

alternative products:At least 4 isoforms, Alpha (shown here), Alpha-B, Beta and Beta-B, are produced by alternative initiation at Met-1 and Met-27. The existence of isoform Alpha and isoform Alpha-B has been proved by mutagenesis. As the sequence environment of the 2 potential ATG initiator codons is the same for the other altrnatively spliced isoforms, alternative initiation of translation could also occur on these transcripts. Additional isoforms seem to exist,disease:Defects in NR3C1 are a cause of glucocorticoid resistance [MIM:138040]; also known as cortisol resistance. It is a hypertensive, hyperandrogenic disorder characterized by increased serum cortisol concentrations. Inheritance is autosomal dominant.,domain:Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal steroid-binding domain.,function:Receptor for glucocorticoids (GC). Has a

## Background

This gene encodes glucocorticoid receptor, which can function both as a transcription factor that binds to glucocorticoid response elements in the promoters of glucocorticoid responsive genes to activate their transcription, and as a regulator of other transcription factors. This receptor is typically found in the cytoplasm, but upon ligand binding, is transported into the nucleus. It is involved in inflammatory responses, cellular proliferation, and differentiation in target tissues. Mutations in this gene are associated with generalized glucocorticoid resistance. Alternative splicing of this gene results in transcript variants encoding either the same or different isoforms. Additional isoforms resulting from the use of alternate in-frame translation initiation sites have also been described, and shown to be functional, displaying diverse cytoplasm-to-nucleus trafficking pat

## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

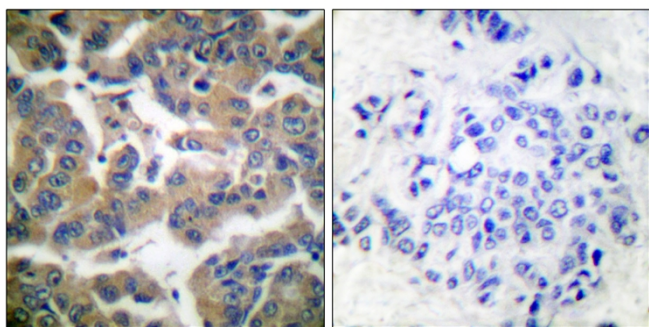
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



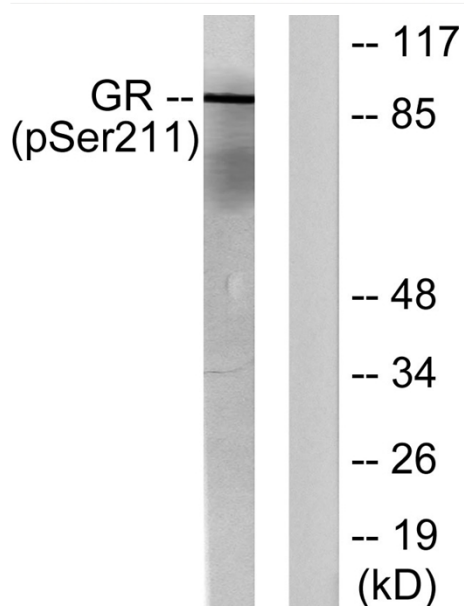
## Products Images



Western Blot analysis of various cells using Phospho-GR (S211) Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using GR (Phospho-Ser211) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells treated with Heat shock, using GR (Phospho-Ser211) Antibody. The lane on the right is blocked with the phospho peptide.