

# Rabbit Anti-Glucocorticoid Receptor antibody

# SL13385R

Product Name:	Glucocorticoid Receptor
Chinese Name:	糖皮质激素受体(β)抗体
Alias:	Glucocorticoid Receptor beta; GCCR; GCR; GCR_HUMAN; glucocorticoid nuclear receptor variant 1; Glucocorticoid receptor beta isoform; GR; GRL; nr3c1; Nuclear receptor subfamily 3 group C member 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow- Cyt=3ug/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	86kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Glucocorticoid Receptor beta:51-150/777
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Steroid receptors are ligand-dependent, intracellular proteins that stimulate transcription of specific genes by binding to specific DNA sequences following activation by the appropriate hormone. Glucocorticoids are a family of steroids necessary for the regulation of energy metabolism and the immune and inflammatory responses. These

compounds exert their effect through their interaction with the glucocoticoid receptor (GR) and that complex's subsequent association with DNA. All normal mammalian tissues examined to date have been shown to contain glucocorticoid receptor.

#### 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.

## Subunit:

Heteromultimeric cytoplasmic complex with HSP90, HSP70, and FKBP5 or another immunophilin, or the immunophilin homolog PPP5C. Directly interacts with UNC45A. Upon ligand binding FKBP5 dissociates from the complex and FKBP4 takes its place, thereby linking the complex to dynein and mediating transport to the nucleus, where the complex dissociates (By similarity). Binds to DNA as a homodimer, and as a heterodimer with NR3C2 or the retinoid X receptor. Binds STAT5A and STAT5B homodimers and heterodimers. Interacts with NRIP1, POU2F1, POU2F2 and TRIM28. Interacts with NCOA1, NCOA3, SMARCA4, SMARCC1, SMARCD1, and SMARCE1 (By similarity). Interacts with several coactivator complexes, including the SMARCA4 complex, CREBBP/EP300, TADA2L and p160 coactivators such as NCOA2 and NCOA6. Interaction with BAG1 inhibits transactivation. Interacts with HEXIM1, PELP1 and TGFB111.

## Subcellular Location:

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

## **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.

#### **Post-translational modifications:**

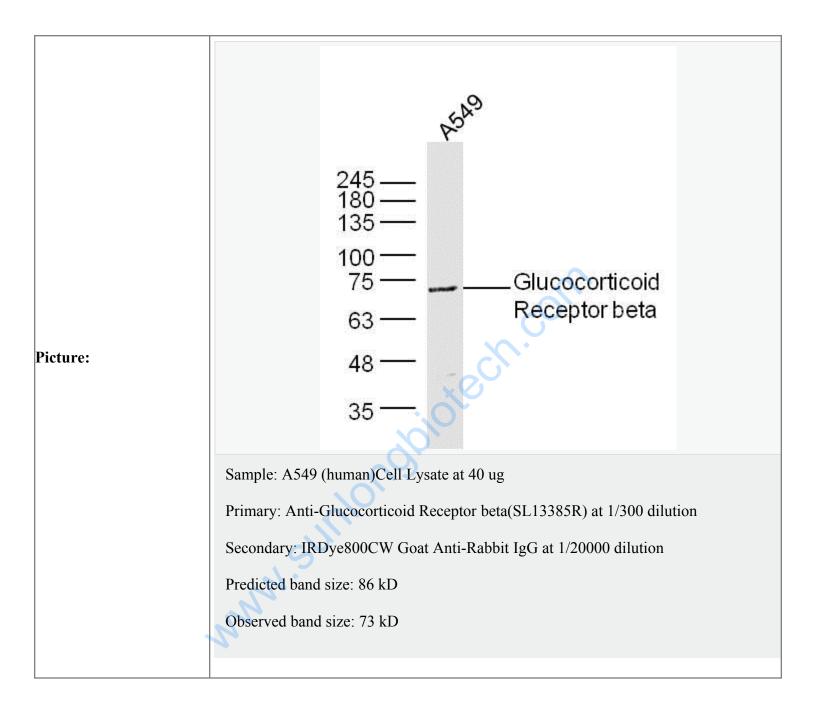
Increased proteasome-mediated degradation in response to glucocorticoids. Phosphorylated in the absence of hormone; becomes hyperphosphorylated in the presence of glucocorticoid. The Ser-203-phosphorylated form is mainly cytoplasmic, and the Ser-211-phosphorylated form is nuclear. Transcriptional activity correlates with the amount of phosphorylation at Ser-211.

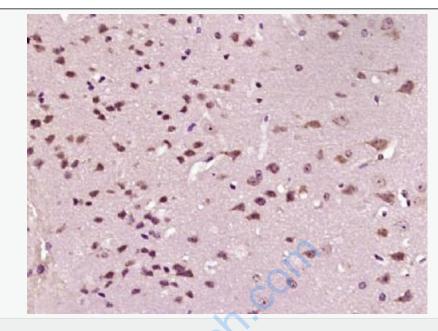
Sumoylated; this reduces transcription transactivation.

Ubiquitinated; restricts glucocorticoid-mediated transcriptional signaling.

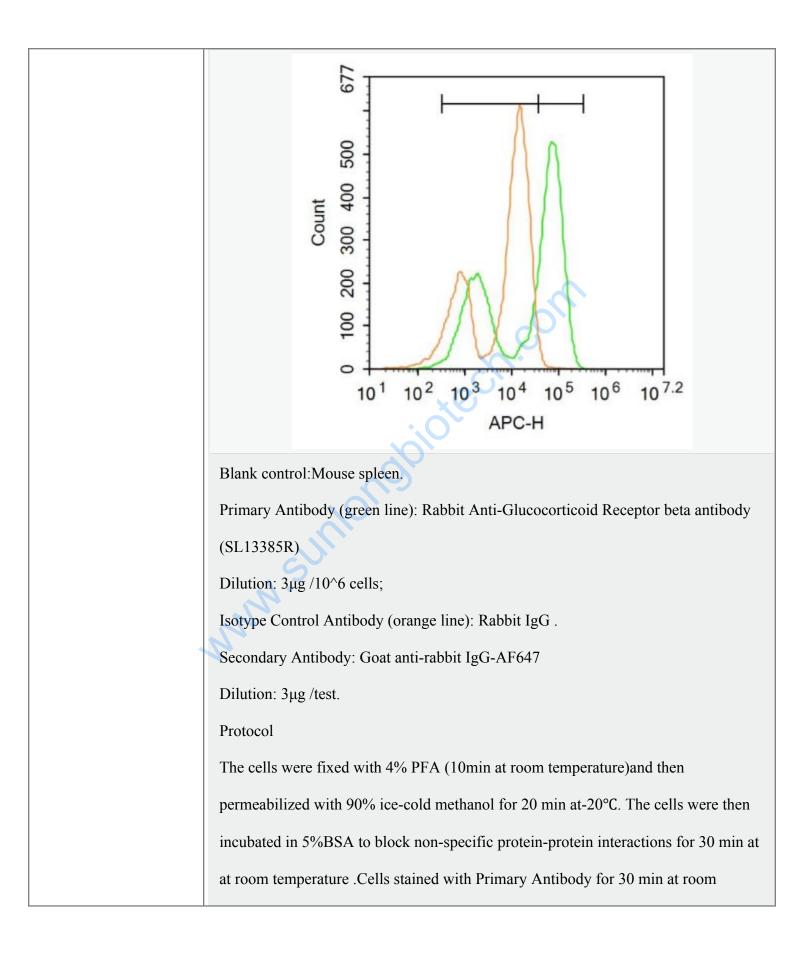
#### **DISEASE:**

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. Similarity: Belongs to the nuclear hormone receptor family. NR3 subfamily. Contains 1 nuclear receptor DNA-binding domain. SWISS: P04150 oiotech.com Gene ID: 2908 Database links: Entrez Gene: 2908 Human Entrez Gene: 14815 Mouse Entrez Gene: 24413 Rat Omim: 138040 Human SwissProt: P04150 Human SwissProt: P06537 Mouse SwissProt: P06536 Rat Unigene: 122926 Human Unigene: 129481 Mouse Unigene: 90070 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.





Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GCR) Polyclonal Antibody, Unconjugated (SL13385R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



temperature. The secondary antibody used for 40 min at room temperature.
Acquisition of 20,000 events was performed.

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