

GR (41): sc-136209

BACKGROUND

The glucocorticoid receptor (GR) is a ubiquitously expressed transcription factor that mediates the effects of glucocorticoids. The most abundant isoform is GR α . GR induces or represses the expression of genes in response to glucocorticoids, mediating such processes as apoptosis, cell growth and differentiation. A significant class of genes suppressed by GR is controlled by the transcription factor AP-1. GR has also been shown to be the limiting factor in the induction of gene expression by glucocorticoids. It has been revealed that GR forms a complex with HSP 90, rendering the non-ligand bound receptor transcriptionally inactive. More importantly, mutant GRs lacking the signaling domain remain constitutively active.

REFERENCES

- Hollenberg, S.M., et al. 1985. Primary structure and expression of a functional human glucocorticoid receptor cDNA. *Nature* 318: 635-641.
- Strähle, U., et al. 1992. At least three promoters direct expression of the mouse glucocorticoid receptor gene. *Proc. Natl. Acad. Sci. USA* 89: 6731-6735.
- Gorovits, R., et al. 1994. Developmental changes in the expression and compartmentalization of the glucocorticoid receptor in embryonic retina. *Proc. Natl. Acad. Sci. USA* 91: 4786-4790.
- Hutchison, K.A., et al. 1994. All of the factors required for assembly of the glucocorticoid receptor into a functional heterocomplex with heat shock protein 90 are preassociated in a self-sufficient protein folding structure, a "foldosome". *J. Biol. Chem.* 269: 27894-27899.

CHROMOSOMAL LOCATION

Genetic locus: NR3C1 (human) mapping to 5q31.3.

SOURCE

GR (41) is a mouse monoclonal antibody raised against amino acids 176-289 of GR α of human origin.

PRODUCT

Each vial contains 50 μ g IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GR (41) is recommended for detection of GR of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for GR siRNA (h): sc-35505, GR shRNA Plasmid (h): sc-35505-SH and GR shRNA (h) Lentiviral Particles: sc-35505-V.

Molecular Weight of GR α : 95 kDa.

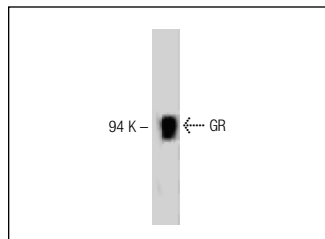
Molecular Weight of GR β : 90 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or HCT-8 cell lysate: sc-24675.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



GR (41): sc-136209. Western blot analysis of GR α expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS


- Relic, B., et al. 2016. BAY 11-7085 induces glucocorticoid receptor activation and autophagy that collaborate with apoptosis to induce human synovial fibroblast cell death. *Oncotarget* 7: 23370-23382.
- Malaise, O., et al. 2016. Glucocorticoid-induced leucine zipper (GILZ) is involved in glucocorticoid-induced and mineralocorticoid-induced leptin production by osteoarthritis synovial fibroblasts. *Arthritis Res. Ther.* 18: 219.

RESEARCH USE

For research use only, not for use in diagnostic procedures. Not for resale.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.



See **GR (G-5): sc-393232** for GR antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.