

GR (FiGR): sc-12763



The Power to Question

BACKGROUND

The glucocorticoid receptor (GR) is an 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 and 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.

CHROMOSOMAL LOCATION

Genetic locus: NR3C1 (human) mapping to 5q31.3; Nr3c1 (mouse) mapping to 18 B3.

SOURCE

GR (FiGR) is a mouse monoclonal antibody raised against amino acids 395-411 of GR of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-12763 X, 200 μ g/0.1 ml.

GR (FiGR) is available conjugated to agarose (sc-12763 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-12763 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-12763 PE), fluorescein (sc-12763 FITC), Alexa Fluor® 488 (sc-12763 AF488), Alexa Fluor® 546 (sc-12763 AF546), Alexa Fluor® 594 (sc-12763 AF594) or Alexa Fluor® 647 (sc-12763 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-12763 AF680) or Alexa Fluor® 790 (sc-12763 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

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

Suitable for use as control antibody for GR siRNA (h): sc-35505, GR siRNA (m): sc-35506, GR shRNA Plasmid (h): sc-35505-SH, GR shRNA Plasmid (m): sc-35506-SH, GR shRNA (h) Lentiviral Particles: sc-35505-V and GR shRNA (m) Lentiviral Particles: sc-35506-V.

GR (FiGR) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GR α : 95 kDa.

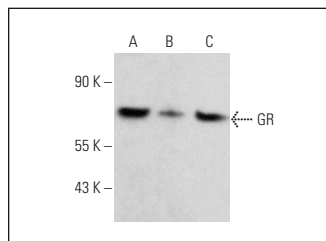
Molecular Weight of GR β : 90 kDa.

Positive Controls: KNRK nuclear extract: sc-2141, Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

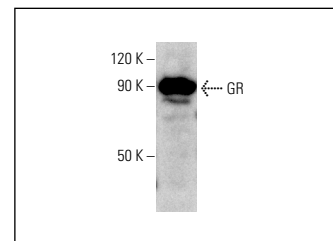
STORAGE

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

DATA



GR (FiGR): sc-12763. Western blot analysis of GR expression in HeLa nuclear extract (A) and Hep G2 (B) and Jurkat (C) whole cell lysates.



GR (FiGR): sc-12763. Western blot analysis of GR expression in KNRK nuclear extract.

SELECT PRODUCT CITATIONS

- Eberhardt, W., et al. 2002. Glucocorticoid-mediated suppression of cytokine-induced matrix metalloproteinase-9 expression in rat mesangial cells: involvement of nuclear factor- κ B and Ets transcription factors. *Mol. Endocrinol.* 16: 1752-1766.
- Rani, C.S., et al. 2009. Identification of an activator protein-1-like sequence as the glucocorticoid response element in the rat tyrosine hydroxylase gene. *Mol. Pharmacol.* 75: 589-598.
- Hidalgo, A.A., et al. 2011. Dexamethasone enhances 1 α ,25-Dihydroxyvitamin D₃ effects by increasing vitamin D receptor transcription. *J. Biol. Chem.* 286: 36228-36237.
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- Conceição, E.P., et al. 2016. Calcium reduces vitamin D and glucocorticoid receptors in the visceral fat of obese male rats. *J. Endocrinol.* 230: 263-274.
- He, H., et al. 2019. Intrauterine programming of the glucocorticoid-Insulin-like growth factor 1 (GC-IGF1) axis mediates glomerulosclerosis in female adult offspring rats induced by prenatal ethanol exposure. *Toxicol. Lett.* 311: 17-26.
- Li, S., et al. 2020. MicroRNA-382-5p targets nuclear receptor subfamily 3 group C member 1 to regulate depressive-like behaviors induced by chronic unpredictable mild stress in rats. *Neuropsychiatr. Dis. Treat.* 16: 2053-2061.
- Gulfo, J., et al. 2021. Corticosteroid-binding-globulin (CBG)-deficient mice show high pY216-GSK3 β and phosphorylated-Tau levels in the hippocampus. *PLoS ONE* 16: e0246930.

RESEARCH USE

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

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