

GR (3D5): sc-56851

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 (3D5) is a mouse monoclonal antibody raised against a peptide fragment of a well conserved region of GR of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GR (3D5) is recommended for detection of GR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1 x 10⁶ cells); non cross-reactive with TGB, BSA and KLH.

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.

Molecular Weight of GR α : 95 kDa.

Molecular Weight of GR β : 90 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138, KNRK nuclear extract: sc-2141 or A-431 whole cell lysate: sc-2201.

STORAGE

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

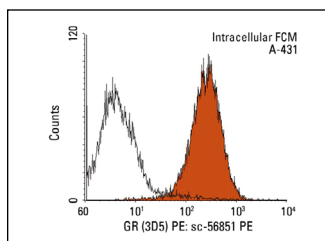
PROTOCOLS

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

RESEARCH USE

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

DATA



GR (3D5): sc-56851. Indirect, intracellular FCM analysis of fixed and permeabilized A-431 cells stained with GR (3D5), followed by PE-conjugated goat anti-mouse IgG₁: sc-3764. Black line histogram represents the isotype control, normal mouse IgG₁: sc-3877.

SELECT PRODUCT CITATIONS

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2. Tone, A.A., et al. 2012. Prolonged postovulatory proinflammatory signaling in the fallopian tube epithelium may be mediated through a BRCA1/DAB2 axis. *Clin. Cancer Res.* 18: 4334-4344.
3. Battle, R., et al. 2013. Snail1 controls TGF- β responsiveness and differentiation of mesenchymal stem cells. *Oncogene* 32: 3381-3389.
4. An, B.C., et al. 2016. Epigenetic and glucocorticoid receptor-mediated regulation of glutathione peroxidase 3 in lung cancer cells. *Mol. Cells* 39: 631-638.
5. Azogu, I. and Plamondon, H. 2017. Blockade of TrkB receptors in the nucleus accumbens prior to heterotypic stress alters corticotropin-releasing hormone (CRH), vesicular glutamate transporter 2 (vGluT2) and glucocorticoid receptor (GR) within the mesolimbic pathway. *Horm. Behav.* 90: 98-112.
6. Woo, H., et al. 2018. Chronic restraint stress induces hippocampal memory deficits by impairing Insulin signaling. *Mol. Brain* 11: 37.
7. Chen, Z.S., et al. 2018. Planar cell polarity gene Fuz triggers apoptosis in neurodegenerative disease models. *EMBO Rep.* 19 pii: e45409.
8. Huang, W., et al. 2019. Decreased H3K9 acetylation level of LXR α mediated dexamethasone-induced placental cholesterol transport dysfunction. *Biochim. Biophys. Acta Mol. Cell Biol. Lipids* 1864: 158524.
9. Shen, G.Y., et al. 2019. Let-7f-5p regulates TGFBR1 in glucocorticoid-inhibited osteoblast differentiation and ameliorates glucocorticoid-induced bone loss. *Int. J. Biol. Sci.* 15: 2182-2197.

CONJUGATES

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.