

Glucocorticoid Receptor (GR) Active Protein | GR active protein

Active Glucocorticoid Receptor (GR)

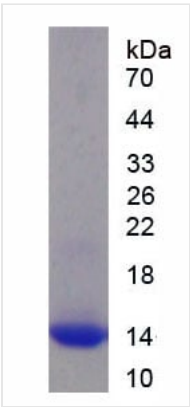
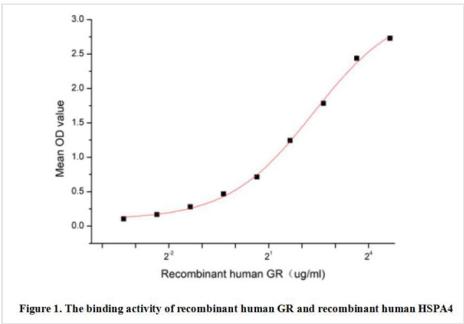
CATALOG # AAA161853	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Glucocorticoid Receptor (GR); Active Glucocorticoid Receptor (GR); Glucocorticoid Receptor; GCCR; GCR; NR3C1; GRL; NR3-C1; Nuclear Receptor Subfamily 3; Group C; Member 14; GR active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Val41~Tyr1 84
Applicable Applications for GR active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.2
Research Area	Signal transduction, Endocrinology, Hormone metabolism
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



SDS-PAGE
Figure. SDS-PAGE

Bioactivity
Glucocorticoid Receptor (GR) is a member of the steroid receptor superfamily, which includes receptors for other steroid hormones such as estrogens, progestogens, androgens and mineralocorticoids. GR is widely distributed in various types of human cells, especially in liver, muscle, adipose tissue, lung, brain and other organs. GR plays a role in signaling within cells. When glucocorticoids enter cells and bind to GR, GR undergoes conformational changes that activate its transcriptional activity. It has been identified that the binding of Heat Shock 70kDa Protein 4 (HSPA4) to GR plays a key role in glucocorticoid signaling, which not only participates in the stabilization and activation of receptors, but also may affect the effect of drugs. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human GR and recombinant human HSPA4. Briefly, GR was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to HSPA4-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-GR pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human GR and recombinant human HSPA4 was shown in Figure 1, the EC50 for this effect is 5.1 ug/mL.

ADDITIONAL INFORMATION

Product Categories/Family for GR active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4504133
NCBI GeneID	2908
NCBI Accession #	NP_000167.1
NCBI GenBank Nucleotide #	NM_000176.2
UniProt Accession #	P04150; P04151; Q53EP5; Q6N0A4; A0ZXF9; B0LPG8; D3DQF4
Molecular Weight	85,659 Da
NCBI Official Full Name	glucocorticoid receptor isoform alpha
NCBI Official Synonym Full Names	nuclear receptor subfamily 3, group C, member 1 (glucocorticoid receptor)
NCBI Official Symbol	NR3C1
NCBI Official Synonym Symbols	GR; GCR; GRL; GCCR
NCBI Protein Information	glucocorticoid receptor; glucocorticoid nuclear receptor variant 1
UniProt Protein Name	Glucocorticoid receptor
UniProt Gene Name	NR3C1
UniProt Synonym Gene Names	GRL; GR

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/glucocorticoid-receptor-gr/161853>