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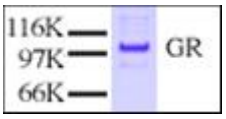
GR (Glucocorticoid Receptor)

Catalog Reference	Vial Size		Lot Number	Molecular Mass	Accession
P1051-01	5,000 units (ng)	☐	102606XY	105 kDa	NM_000176
P1051-02	12,500 units (ng)	☐			

Storage conditions:
Store at -80 °C

Description:
Glucocorticoids are a vital class of steroid hormones that mediate profound and diverse physiological effects in vertebrates from fish to man. Although named for their role in glucose homeostasis, glucocorticoids are eminently important throughout physiology, with regulatory roles in development, metabolism, neurobiology, programmed cell death, and many other functions. In addition to these far-reaching physiological roles, corticosteroids are among the most widely prescribed class of drugs in the world. The physiological response and sensitivity to glucocorticoids varies among species, individuals, tissues, cell types, and even during the cell cycle (1, 2). Additionally, several pathological conditions lead to, or are a result, of glucocorticoid resistance or hypersensitivity (3). The ligand-activated GR also interacts with a multitude of transcription factors such as c-jun (4), nuclear factor-B (NF-B) (5), the TFIID complex (6), STAT5 (7), as well as a host of coactivators (8). In addition, the GR interacts with numerous cytosolic proteins including chaperones, kinases, phosphatases, nuclear shuttling proteins, and the proteasome (9).



Source:
Recombinant His tagged GR was expressed in a baculovirus system and purified by affinity and FPLC chromatography.

Applications:
GR has been applied in DNA and protein-protein interaction assays. **For Research Use Only.**

Quality Control:
The purified recombinant protein is greater than 95% homogeneous based on SDS-PAGE analysis.

Unit Definition:
1 unit equals 1 nanogram purified protein. 20 units are sufficient for a gel-mobility shift assay and 100 units are sufficient for a protein-protein interactions assay.

Concentration:
0.25 mg/ml (in 1x dilution buffer A)

Reagents Supplied:
1x dilution buffer A: 20 mM Tris-Cl (pH 8.0), 20% Glycerol, 100 mM KCl, 1 mM DTT and 0.2 mM EDTA

References:
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2. Lim-Tio et al., (1997) Endocrinology 138, 2537-2543
3. Kino et al., (2001) Endocrinology 169, 437-445
4. Yangyen et al., (1990) Cell 62, 1205-1215
5. McKay et al., (1999) Endocr. Rev. 20, 435-459
6. Ford et al., (1997) Mol Endocrinol. 11, 1467-1475
7. Stocklin et al., (1996) Nature 383, 726-728
8. Jenkins et al., (2001) Endocrinol. Metab. 12, 122-126
9. Yudt et al., (2002) Mol. Endocrinol. 16, 1719-1726