

## GR Monoclonal Antibody

<b>Catalog No :</b>	YM0313
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IHC;IF;FCM;ELISA
<b>Target :</b>	GR
<b>Fields :</b>	>>Neuroactive ligand-receptor interaction
<b>Gene Name :</b>	NR3C1
<b>Protein Name :</b>	Glucocorticoid receptor
<b>Human Gene Id :</b>	2908
<b>Human Swiss Prot No :</b>	P04150
<b>Mouse Swiss Prot No :</b>	P06537
<b>Immunogen :</b>	Purified recombinant fragment of human GR expressed in E. Coli.
<b>Specificity :</b>	GR Monoclonal Antibody detects endogenous levels of GR protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	86kD

**Cell Pathway :** Neuroactive ligand-receptor interaction;

**P References :** 1. J Clin Endocrinol Metab. 2008 Dec;93(12):4963-8.  
2. Epigenetics. 2008 Mar-Apr;3(2):97-106.

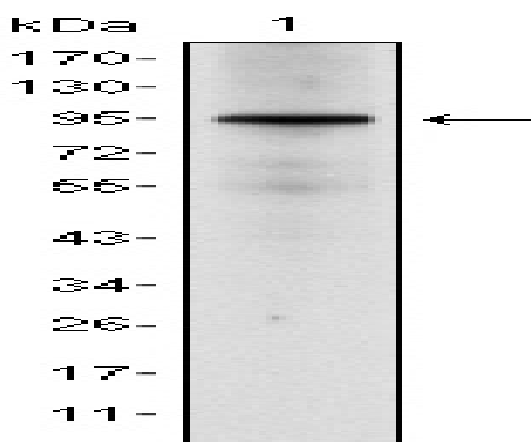
**Background :** This gene encodes glucocorticoid receptor, which can function both as a transcription factor that binds to glucocorticoid response elements in the promoters of glucocorticoid responsive genes to activate their transcription, and as a regulator of other transcription factors. This receptor is typically found in the cytoplasm, but upon ligand binding, is transported into the nucleus. It is involved in inflammatory responses, cellular proliferation, and differentiation in target tissues. Mutations in this gene are associated with generalized glucocorticoid resistance. Alternative splicing of this gene results in transcript variants encoding either the same or different isoforms. Additional isoforms resulting from the use of alternate in-frame translation initiation sites have also been described, and shown to be functional, displaying diverse cytoplasm-to-nucleus trafficking pat

**Function :** alternative products:At least 4 isoforms, Alpha (shown here), Alpha-B, Beta and Beta-B, are produced by alternative initiation at Met-1 and Met-27. The existence of isoform Alpha and isoform Alpha-B has been proved by mutagenesis. As the sequence environment of the 2 potential ATG initiator codons is the same for the other alternatively spliced isoforms, alternative initiation of translation could also occur on these transcripts. Additional isoforms seem to exist,disease:Defects in NR3C1 are a cause of glucocorticoid resistance [MIM:138040]; also known as cortisol resistance. It is a hypertensive, hyperandrogenic disorder characterized by increased serum cortisol concentrations. Inheritance is autosomal dominant.,domain:Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal steroid-binding domain.,function:Receptor for glucocorticoids (GC). Has a

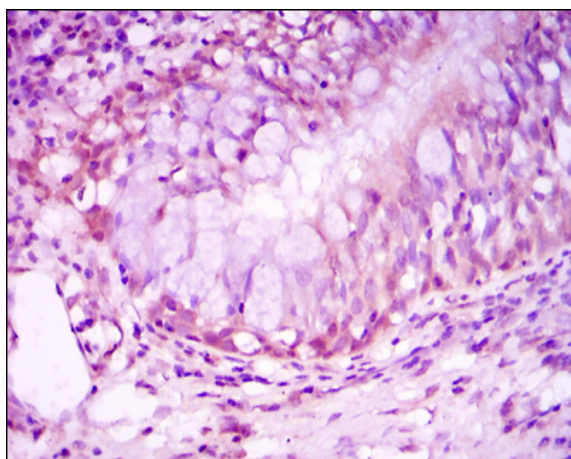
**Subcellular Location :** [Isoform Alpha]: Cytoplasm . Nucleus . Mitochondrion . Cytoplasm, cytoskeleton, spindle . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . After ligand activation, translocates from the cytoplasm to the nucleus. In the presence of NR1D1 shows a time-dependent subcellular localization, localizing to the cytoplasm at ZT8 and to the nucleus at ZT20 (By similarity). Lacks this diurnal pattern of localization in the absence of NR1D1, localizing to both nucleus and the cytoplasm at ZT8 and ZT20 (By similarity). . ; [Isoform Beta]: Nucleus . Cytoplasm . Expressed predominantly in the nucleus with some expression also detected in the cytoplasm. . ; [Isoform Alpha-B]: Nucleus . Cytoplasm . After ligand activation, translocates from the cytoplasm to the nucleus. .

**Expression :** Widely expressed including bone, stomach, lung, liver, colon, breast, ovary, pancreas and kidney (PubMed:25847991). In the heart, detected in left and right atria, left and right ventricles, aorta, apex, intraventricular septum, and atrioventricular node as well as whole adult and fetal heart (PubMed:10902803). ; [Isoform Beta]: Widely expressed including brain, bone marrow, thymus, spleen, liver, kidney, pancreas, lung, fat, skeletal muscle, heart, placenta and blood leukocytes. ; [Isoform Alpha-2]: Widely expressed.

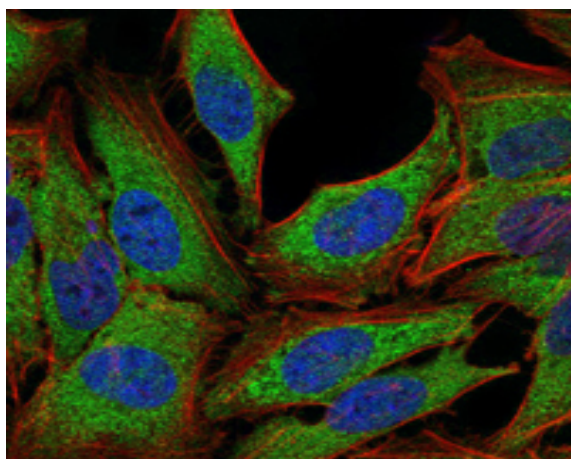
## Products Images



Western Blot analysis using GR Monoclonal Antibody against HeLa cell lysate.



Immunohistochemistry analysis of paraffin-embedded lung cancer tissues with DAB staining using GR Monoclonal Antibody.



Immunofluorescence analysis of PC-2 cells using GR Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin

Flow cytometric analysis of K562 cells using GR Monoclonal Antibody (green) and negative control (purple).

