

### KD-Validated Anti-NR3C1 Mouse Monoclonal Antibody Mouse monoclonal antibody Catalog # AGI1779

# **Specification**

# **KD-Validated Anti-NR3C1 Mouse Monoclonal Antibody - Product Information**

Application Primary Accession Reactivity Clonality Isotype Calculated MW	WB <u>P04150</u> Human Monoclonal Mouse IgG1 kappa Predicted, 86 kDa , o bserved , 94 kDa KDa
Gene Name	NR3C1
Aliases	NR3C1; Nuclear Receptor Subfamily 3 Group C Member 1; GR; Glucocorticoid Receptor; GRL; Nuclear Receptor Subfamily 3, Group C, Member 1 (Glucocorticoid Receptor); Nuclear Receptor Subfamily 3 Group C Member 1 Variant HGR-B(54); Nuclear Receptor Subfamily 3 Group C Member 1 Variant HGR-B(77); Nuclear Receptor Subfamily 3 Group C Member 1 Variant HGR-B(93); Nuclear Receptor Subfamily 3, Group C, Member 1; GCRST; GCCR; GCR
Immunogen	Recombinant protein of human Glucocorticoid Receptor

# KD-Validated Anti-NR3C1 Mouse Monoclonal Antibody - Additional Information

Gene ID 2908 Other Names Glucocorticoid receptor, GR, Nuclear receptor subfamily 3 group C member 1, NR3C1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=7978" target="\_blank">HGNC:7978</a>), GRL

# KD-Validated Anti-NR3C1 Mouse Monoclonal Antibody - Protein Information

Name NR3C1 (<u>HGNC:7978</u>)

# Synonyms GRL

#### Function

Receptor for glucocorticoids (GC) (PubMed:<a href="http://www.uniprot.org/citations/27120390" target="\_blank">27120390</a>, PubMed:<a href="http://www.uniprot.org/citations/37478846" target="\_blank">37478846</a>). Has a dual mode of action: as a transcription factor that binds to glucocorticoid response elements (GRE), both for nuclear and mitochondrial DNA, and as a



# modulator of other transcription factors (PubMed: <a

href="http://www.uniprot.org/citations/28139699" target="\_blank">28139699</a>). Affects inflammatory responses, cellular proliferation and differentiation in target tissues. Involved in chromatin remodeling (PubMed:<a href="http://www.uniprot.org/citations/9590696" target="\_blank">9590696</a>). Plays a role in rapid mRNA degradation by binding to the 5' UTR of target mRNAs and interacting with PNRC2 in a ligand-dependent manner which recruits the RNA helicase UPF1 and the mRNA-decapping enzyme DCP1A, leading to RNA decay (PubMed:<a href="http://www.uniprot.org/citations/25775514" target="\_blank">25775514</a>). Could act as a coactivator for STAT5-dependent transcription upon growth hormone (GH) stimulation and could reveal an essential role of hepatic GR in the control of body growth (By similarity).

# **Cellular Location**

[Isoform Alpha]: Cytoplasm. Nucleus. Mitochondrion. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome

{ECO:0000250|UniProtKB:P06537}. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:P06537}. Note=After ligand activation, translocates from the cytoplasm to the nucleus (PubMed:30698747). The hormone-occupied receptor undergoes rapid exchange between chromatin and the nucleoplasmic compartment (By similarity). 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). Upon dexamethasone binding associates with the glucocorticoid response elements of target genes (By similarity) {ECO:0000250|UniProtKB:P06537, ECO:0000269|PubMed:30698747} [Isoform Alpha-B]: Nucleus. Cytoplasm Note=After ligand activation, translocates from the cytoplasm to the nucleus.

### **Tissue Location**

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 Alpha-2]: Widely expressed.

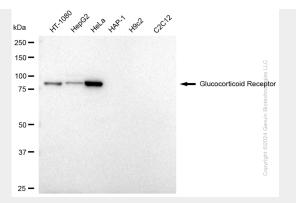
# KD-Validated Anti-NR3C1 Mouse Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

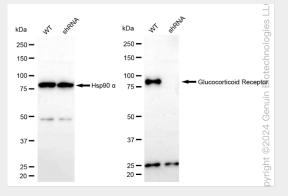
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# KD-Validated Anti-NR3C1 Mouse Monoclonal Antibody - Images





Western blotting analysis using anti-Glucocorticoid Receptor antibody (Cat#AGI1779). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Glucocorticoid Receptor antibody (Cat#AGI1779, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-Glucocorticoid Receptor antibody (Cat#AGI1779). Glucocorticoid Receptor expression in wild type (WT) and Glucocorticoid Receptor shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-Glucocorticoid Receptor antibody (Cat#AGI1779, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.