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KD-Validated Anti-NR3C1 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI1779

Product Information

Application	WB
Primary Accession	P04150
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1 kappa
Clone Names	24GB2760
Calculated MW	85659
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

Additional Information

Gene ID	2908
Other Names	Glucocorticoid receptor, GR, Nuclear receptor subfamily 3 group C member 1, NR3C1 (HGNC:7978), GRL

Protein Information

Name	NR3C1 (HGNC:7978)
Synonyms	GRL
Function	Receptor for glucocorticoids (GC) (PubMed: 27120390, PubMed:37478846). 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:28139699). Affects inflammatory responses, cellular proliferation and differentiation in target tissues. Involved in chromatin remodeling (PubMed:9590696). 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:25775514). 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.

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