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NR3C1 Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM2187b

Product Information

Application	WB, E
Primary Accession	P04150
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgM,k
Clone Names	740CT12.1.5
Calculated MW	85659
Antigen Region	136-164

Additional Information

Gene ID	2908
Other Names	Glucocorticoid receptor, GR, Nuclear receptor subfamily 3 group C member 1, NR3C1, GRL
Target/Specificity	This NR3C1 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 136-164 amino acids from human NR3C1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NR3C1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

Background

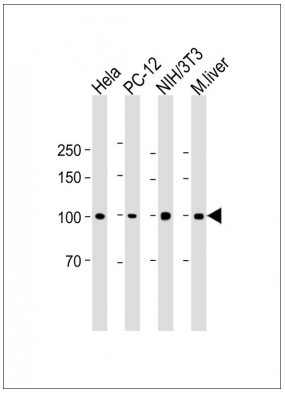
Receptor for glucocorticoids (GC). Has a dual mode of action: as a transcription factor that binds to glucocorticoid response elements (GRE) and as a modulator of other transcription factors. Affects inflammatory responses, cellular proliferation and differentiation in target tissues. Could act as a 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. Involved in chromatin remodeling. Plays a significant role in transactivation. Involved in nuclear translocation (By similarity).

References

Hollenberg S.M., et al. Nature 318:635-641(1985).
Encio I.J., et al. J. Biol. Chem. 266:7182-7188(1991).
Wang W., et al. Nucleic Acids Res. 39:44-58(2011).
Turner J.D., et al. Ann. N. Y. Acad. Sci. 1095:334-341(2007).
Munroe D.G., et al. Submitted (SEP-1993) to the EMBL/GenBank/DDBJ databases.

Images

All lanes: Anti-NR3C1 (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: PC-12 whole cell lysate Lane 3: NIH/3T3 whole cell lysate Lane 4: Mouse liver lysate Lysates/proteins at 20 µg per lane. Secondary: Goat



Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/8000 dilution. Observed band size: 100 KDa Blocking/Dilution buffer: 5% NFDM/TBST.