10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NR2C2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19331b

Product Information

Application	IF, WB, E
Primary Accession	P49116
Other Accession	P55094, P49117, NP_003289.2
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	65414
Antigen Region	438-466

Additional Information

Gene ID	7182
Other Names	Nuclear receptor subfamily 2 group C member 2, Orphan nuclear receptor TAK1, Orphan nuclear receptor TR4, Testicular receptor 4, NR2C2, TAK1, TR4
Target/Specificity	This NR2C2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 438-466 amino acids from the C-terminal region of human NR2C2.
Dilution	IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	NR2C2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NR2C2
Synonyms	TAK1, TR4
Function	Orphan nuclear receptor that can act as a repressor or activator of

transcription. An important repressor of nuclear receptor signaling pathways such as retinoic acid receptor, retinoid X, vitamin D3 receptor, thyroid hormone receptor and estrogen receptor pathways. May regulate gene expression during the late phase of spermatogenesis. Together with NR2C1, forms the core of the DRED (direct repeat erythroid-definitive) complex that represses embryonic and fetal globin transcription including that of GATA1. Binds to hormone response elements (HREs) consisting of two 5'-AGGTCA-3' half site direct repeat consensus sequences. Plays a fundamental role in early embryonic development and embryonic stem cells. Required for normal spermatogenesis and cerebellum development. Appears to be important for neurodevelopmentally regulated behavior (By similarity). Activates transcriptional activity of LHCG. Antagonist of PPARA-mediated transactivation.

Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:10644740, ECO:0000269|PubMed:15302918}

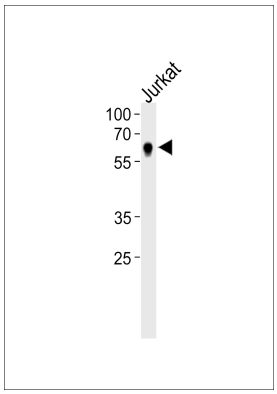
Background

Members of the nuclear hormone receptor family, such as NR2C2, act as ligand-activated transcription factors. The proteins have an N-terminal transactivation domain, a central DNA-binding domain with 2 zinc fingers, and a ligand-binding domain at the C terminus. The activated receptor/ligand complex is translocated to the nucleus where it binds to hormone response elements of target genes (Yoshikawa et al., 1996 [PubMed 8661150]).

References

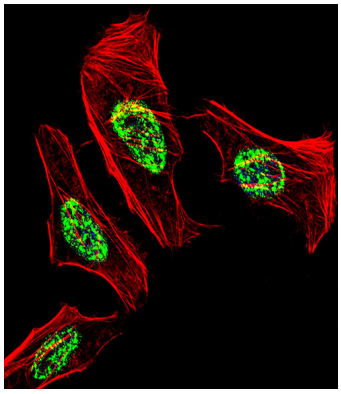
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Srivastava, R., et al. J. Biol. Chem. 285(15):11100-11105(2010)
Ear, T., et al. J. Immunol. 184(7):3897-3906(2010)
Suzuki, S., et al. J. Biol. Chem. 285(7):4441-4446(2010)
Huang, Y.H., et al. J. Cell. Physiol. 222(2):347-356(2010)

Images



NR2C2 Antibody (C-term) (Cat. #AP19331b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the NR2C2 antibody detected the NR2C2 protein (arrow).

Fluorescent confocal image of Hela cell stained with NR2C2 Antibody (C-term)(Cat#AP19331b).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with NR2C2 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red)



conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min). NR2C2 immunoreactivity is localized to Nucleus significantly.