

NR0B2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11075c

Specification

NR0B2 Antibody (Center) - Product Information

Application WB, IHC-P, IF, FC,E

Primary Accession 015466 Other Accession NP 068804.1 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 28058 Antigen Region 56-83

NR0B2 Antibody (Center) - Additional Information

Gene ID 8431

Other Names

Nuclear receptor subfamily 0 group B member 2, Orphan nuclear receptor SHP, Small heterodimer partner, NR0B2, SHP

Target/Specificity

This NR0B2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 56-83 amino acids from the Central region of human NR0B2.

Dilution

WB~~1:1000 IHC-P~~1:50~100 IF~~1:10~50 FC~~1:10~50

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

NR0B2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

NR0B2 Antibody (Center) - Protein Information



Name NR0B2

Synonyms SHP

Function Transcriptional regulator that acts as a negative regulator of receptor-dependent signaling pathways (PubMed:22504882). Specifically inhibits transactivation of the nuclear receptor with which it interacts (PubMed:22504882). Inhibits transcriptional activity of NEUROD1 on E-box-containing promoter by interfering with the coactivation function of the p300/CBP-mediated transcription complex for NEUROD1 (PubMed:14752053). Essential component of the liver circadian clock which via its interaction with NR1D1 and RORG regulates NPAS2-mediated hepatic lipid metabolism (By similarity). Regulates the circadian expression of cytochrome P450 (CYP) enzymes (By similarity). Represses: NR5A2 and HNF4A to down-regulate CYP2C38, NFLI3 to up-regulate CYP2A5, BHLHE41/HNF1A axis to up-regulate CYP1A2, CYP2E1 and CYP3A11, and NR1D1 to up-regulate CYP2B10, CYP4A10 and CYP4A14 (By similarity).

Cellular Location

Nucleus. Cytoplasm Note=Colocalizes with NEUROD1 in the nucleus

Tissue Location

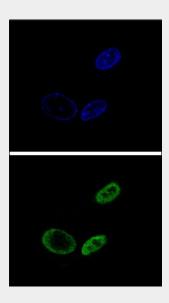
Liver. Low levels of expression were detected in heart and pancreas.

NR0B2 Antibody (Center) - Protocols

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

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

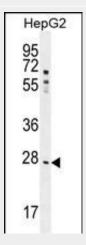
NR0B2 Antibody (Center) - Images



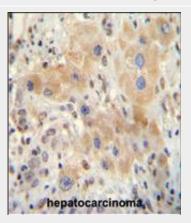
Confocal immunofluorescent analysis of NR0B2 Antibody (Center)(Cat#AP11075c) with HepG2



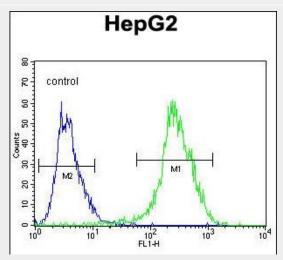
cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



NR0B2 Antibody (Center)(PEI 1:100) (Cat. #AP11075c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the NR0B2 antibody detected the NR0B2 protein (arrow).



NR0B2 antibody (Center) (Cat. #AP11075c) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of NR0B2 antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



NR0B2 Antibody (Center) (Cat. #AP11075c) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



NR0B2 Antibody (Center) - Background

The protein encoded by this gene is an unusual orphan receptor that contains a putative ligand-binding domain but lacks a conventional DNA-binding domain. The gene product is a member of the nuclear hormone receptor family, a group of transcription factors regulated by small hydrophobic hormones, a subset of which do not have known ligands and are referred to as orphan nuclear receptors. The protein has been shown to interact with retinoid and thyroid hormone receptors, inhibiting their ligand-dependent transcriptional activation. In addition, interaction with estrogen receptors has been demonstrated, leading to inhibition of function. Studies suggest that the protein represses nuclear hormone receptor-mediated transactivation via two separate steps: competition with coactivators and the direct effects of its transcriptional repressor function.

NR0B2 Antibody (Center) - References

Zhou, T., et al. J. Biol. Chem. 285(32):24871-24881(2010) Roberts, K.E., et al. Gastroenterology 139(1):130-139(2010) Kim, K., et al. Biochem. J. 427(3):413-422(2010) Yang, Z., et al. J. Int. Med. Res. 38(1):142-149(2010) Ondracek, C.R., et al. J. Virol. 83(23):12535-12544(2009)