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NR1I2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8674C

Product Information

Application	WB, IHC-P, FC, IF, E
Primary Accession	O75469
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21890
Calculated MW	49762
Antigen Region	100-127

Additional Information

Gene ID	8856
Other Names	Nuclear receptor subfamily 1 group I member 2, Orphan nuclear receptor PAR1, Orphan nuclear receptor PXR, Pregnane X receptor, Steroid and xenobiotic receptor, SXR, NR1I2, PXR
Target/Specificity	This NR1I2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 100-127 amino acids from the Central region of human NR1I2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 IF~~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	NR1I2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NR1I2
Synonyms	PXR

Function	Nuclear receptor that binds and is activated by variety of endogenous and xenobiotic compounds. Transcription factor that activates the transcription of multiple genes involved in the metabolism and secretion of potentially harmful xenobiotics, drugs and endogenous compounds. Activated by the antibiotic rifampicin and various plant metabolites, such as hyperforin, guggulipid, colupulone, and isoflavones. Response to specific ligands is species-specific. Activated by naturally occurring steroids, such as pregnenolone and progesterone. Binds to a response element in the promoters of the CYP3A4 and ABCB1/MDR1 genes.
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:12606758}
Tissue Location	Expressed in liver, colon and small intestine.

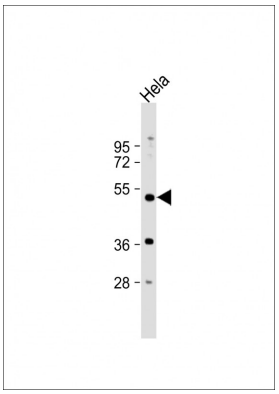
Background

NR1I2 belongs to the nuclear receptor superfamily, members of which are transcription factors characterized by a ligand-binding domain and a DNA-binding domain. This protein is a transcriptional regulator of the cytochrome P450 gene CYP3A4, binding to the response element of the CYP3A4 promoter as a heterodimer with the 9-cis retinoic acid receptor RXR. It is activated by a range of compounds that induce CYP3A4, including dexamethasone and rifampicin.

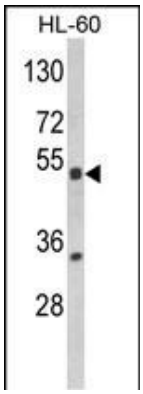
References

Lehmann,J.M., et.al., J. Clin. Invest. 102 (5), 1016-1023 (1998)

Images

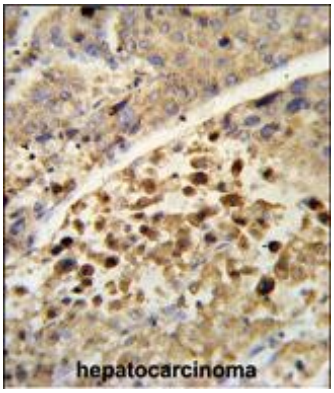


Anti-NR1I2 Antibody (Center) at 1:1000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

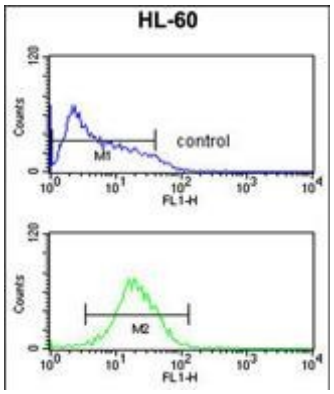


Western blot analysis of NR1I2 Antibody (Center) (Cat. #AP8674c) in HL-60 cell line lysates (35ug/lane). NR1I2 (arrow) was detected using the purified Pab.

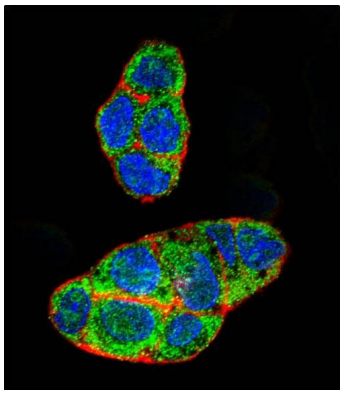
Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with NR1I2 Antibody (Center),



which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



NR1I2 Antibody (Center) (Cat. #AP8674c) flow cytometric analysis of HL-60 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Confocal immunofluorescent analysis of NR1I2 Antibody (Center)(Cat#AP8674c) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).