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Goat Anti-PXR / NR1I2 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1887a

Specification

Goat Anti-PXR / NR1I2 Antibody - Product Information

Application	**WB, E**
Primary Accession	O75469
Other Accession	NP_148934, 8856
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**49762**

Goat Anti-PXR / NR1I2 Antibody - 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

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-PXR / NR1I2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PXR / NR1I2 Antibody - 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.

Goat Anti-PXR / NR1I2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-PXR / NR1I2 Antibody - Images

AF1887a (1 µg/ml) staining of HepG2 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-PXR / NR1I2 Antibody - Background

This gene product belongs to the nuclear receptor superfamily, members of which are transcription factors characterized by a ligand-binding domain and a DNA-binding domain. The encoded 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.

Several alternatively spliced transcripts encoding different isoforms, some of which use non-AUG (CUG) translation initiation codon, have been described for this gene. Additional transcript variants exist, however, they have not been fully characterized.

Goat Anti-PXR / NR1I2 Antibody - References

Polymorphisms of the nuclear receptor pregnane X receptor and organic anion transporter polypeptides 1A2, 1B1, 1B3, and 2B1 are not associated with breast cancer risk. Justenhoven C, et al. Breast Cancer Res Treat, 2010 Jul 16. PMID 20635135.
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Pregnane X receptor is required for interleukin-6-mediated down-regulation of cytochrome P450 3A4 in human hepatocytes. Yang J, et al. Toxicol Lett, 2010 Sep 1. PMID 20538049.
Pregnane X receptor suppresses proliferation and tumourigenicity of colon cancer cells. Ouyang N, et al. Br J Cancer, 2010 Jun 8. PMID 20531417.
Steroid and Xenobiotic Receptor (SXR) as a possible prognostic marker in epithelial ovarian cancer. Yue X, et al. Pathol Int, 2010 May. PMID 20518891.