

Mouse Monoclonal Antibody to NR1I2

Purified Mouse Monoclonal Antibody Catalog # AO2445a

Product Information

Application WB, FC, ICC, E
Primary Accession O75469
Reactivity Human
Host Mouse
Clonality Monoclonal
Clone Names 1D12G1
Isotype Mouse IgG2b

Calculated MW 49762

Description 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.;

Immunogen Purified recombinant fragment of human NR1I2 (AA: 1-142) expressed in E.

Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

Application Note ELISA: 1/1000; WB: 1/500 - 1/2000; ICC: 1/200 - 1/1000; FCM: 1/200 - 1/400

Additional Information

Gene ID 8856

Other Names BXR; PAR; PRR; PXR; SAR; SXR; ONR1; PAR1; PAR2; PARq

Dilution WB~~1:1000 FC~~1:10~50 ICC~~N/A E~~N/A

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.

PrecautionsMouse Monoclonal Antibody to NR1I2 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,

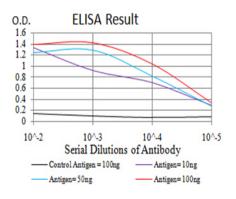
ECO:0000269 | PubMed:12606758}

Tissue Location Expressed in liver, colon and small intestine.

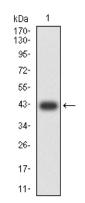
References

1.Int J Mol Sci. 2014 Sep 29;15(10):17457-68.; 2.J Periodontal Res. 2012 Apr;47(2):174-9.;

Images

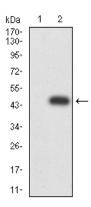


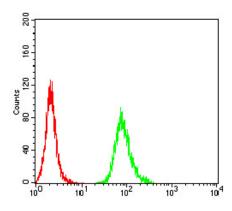
Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



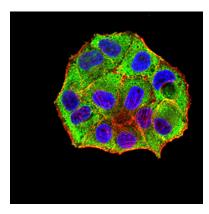
Western blot analysis using NR1I2 mAb against human NR1I2 (AA: 1-142) recombinant protein. (Expected MW is 42.2 kDa)

Western blot analysis using NR1I2 mAb against HEK293 (1) and NR1I2 (AA: 1-142)-hIgGFc transfected HEK293 (2) cell lysate.





Flow cytometric analysis of HepG2 cells using NR1I2 mouse mAb (green) and negative control (red).



Immunofluorescence analysis of Hela cells using NR1I2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.