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Anti-NR5A2/LRH1 Picoband Antibody

Catalog # ABO11989

Product Information

Application	WB
Primary Accession	O00482
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Nuclear receptor subfamily 5 group A member 2(NR5A2) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	2494
Other Names	Nuclear receptor subfamily 5 group A member 2, Alpha-1-fetoprotein transcription factor, B1-binding factor, hB1F, CYP7A promoter-binding factor, Hepatocytic transcription factor, Liver receptor homolog 1, LRH-1, NR5A2, B1F, CPF, FTF
Calculated MW	61331
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Nucleus .
Tissue Specificity	Abundantly expressed in pancreas, less in liver, very low levels in heart and lung. Expressed in the Hep-G2 cell line. Isoform 1 and isoform 2 seem to be present in fetal and adult liver and Hep-G2 cells.
Source	Eukaryota
Protein Name	Nuclear receptor subfamily 5 group A member 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human NR5A2 recombinant protein (Position: K44-R237). Human NR5A2 shares 95% amino acid (aa) sequence identity with both mouse and rat NR5A2.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the nuclear hormone receptor family. NR5 subfamily.

Protein Information

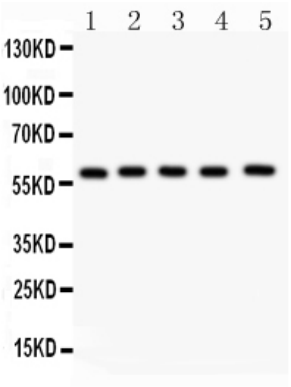
Name	NR5A2 {ECO:0000303|PubMed:11595170, ECO:0000312|HGNC:HGNC:7984}
Function	Orphan nuclear receptor that binds DNA as a monomer to the 5'-TCAAGGCCA-3' sequence and controls expression of target genes: regulates key biological processes, such as early embryonic development, cholesterol and bile acid synthesis pathways, as well as liver and pancreas morphogenesis (PubMed:16289203, PubMed:18410128, PubMed:21614002, PubMed:32433991, PubMed:38409506, PubMed:9786908). Ligand-binding causes conformational change which causes recruitment of coactivators, promoting target gene activation (PubMed:21614002). The specific ligand is unknown, but specific phospholipids, such as phosphatidylethanolamine, phosphatidylserine, dilauroyl phosphatidylcholine and diundecanoyl phosphatidylcholine can act as ligand in vitro (PubMed:15707893, PubMed:15723037, PubMed:15897460, PubMed:21614002, PubMed:22504882, PubMed:23737522, PubMed:26416531, PubMed:26553876). Acts as a pioneer transcription factor, which unwraps target DNA from histones and elicits local opening of closed chromatin (PubMed:38409506). Plays a central role during preimplantation stages of embryonic development (By similarity). Plays a minor role in zygotic genome activation (ZGA) by regulating a small set of two-cell stage genes (By similarity). Plays a major role in morula development (2-16 cells embryos) by acting as a master regulator at the 8-cell stage, controlling expression of lineage-specifying transcription factors and genes involved in mitosis, telomere maintenance and DNA repair (By similarity). Zygotic NR5A2 binds to both closed and open chromatin with other transcription factors, often at SINE B1/Alu repeats DNA elements, promoting chromatin accessibility at nearby regulatory regions (By similarity). Also involved in the epiblast stage of development and embryonic stem cell pluripotency, by promoting expression of POU5F1/OCT4 (PubMed:27984042). Regulates other processes later in development, such as formation of connective tissue in lower jaw and middle ear, neural stem cell differentiation, ovarian follicle development and Sertoli cell differentiation (By similarity). Involved in exocrine pancreas development and acinar cell differentiation (By similarity). Acts as an essential transcriptional regulator of lipid metabolism (PubMed:20159957). Key regulator of cholesterol 7-alpha- hydroxylase gene (CYP7A) expression in liver (PubMed:10359768). Also acts as a negative regulator of inflammation in different organs, such as, liver and pancreas (PubMed:20159957). Protects against intestinal inflammation via its ability to regulate glucocorticoid production (By similarity). Plays an anti-inflammatory role during the hepatic acute phase response by acting as a corepressor: inhibits the hepatic acute phase response by preventing dissociation of the N-Cor corepressor complex (PubMed:20159957). Acts as a regulator of immunity by promoting lymphocyte T-cell development, proliferation and effector functions (By similarity). Also involved in resolution of endoplasmic reticulum stress in the liver (By similarity).
Cellular Location	Nucleus. Chromosome
Tissue Location	Abundantly expressed in pancreas, less in liver, very low levels in heart and lung. Expressed in the Hep-G2 cell line (PubMed:9786908). Isoform 1 and isoform 2 seem to be present in fetal and adult liver and Hep-G2 cells

(PubMed:10359768)

Background

NR5A2 (nuclear receptor subfamily 5, group A, member 2) also known as liver receptor homolog-1 (LRH-1) is a protein that in humans is encoded by the NR5A2 gene. LRH-1 is a member of the nuclear receptor family of intracellulartranscription factors. LRH-1 plays a critical role in the regulation of development,cholesterol transport, bile acid homeostasis andsteroidogenesis. LRH-1 is important for maintaining pluripotence of stem cells during embryonic development. Liver receptor homolog-1 has been shown to interact with the small heterodimer partner.

Images



Anti- NR5A2 Picoband antibody, ABO11989, Western blottingAll lanes: Anti NR5A2 (ABO11989) at 0.5ug/mlLane 1: PANC Whole Cell Lysate at 40ugLane 2: HEPG2 Whole Cell Lysate at 40ugLane 3: A549 Whole Cell Lysate at 40ugLane 4: SMMC Whole Cell Lysate at 40ugLane 5: HELA Whole Cell Lysate at 40ugPredicted bind size: 61KDObserved bind size: 61KD

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