

Mouse Nr5a2 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21181c

Specification

Mouse Nr5a2 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P45448
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	64020
Antigen Region	200-233

Mouse Nr5a2 Antibody (Center) - Additional Information

Gene ID 26424

Other Names

Nuclear receptor subfamily 5 group A member 2, Liver receptor homolog 1, LRH-1, Nr5a2, Lrh1

Target/Specificity

This Mouse Nr5a2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 200-233 amino acids from the Central region of Mouse Nr5a2.

Dilution

WB~~1:1000

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

Mouse Nr5a2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Nr5a2 Antibody (Center) - Protein Information

Name Nr5a2 {ECO:0000303|PubMed:21614002, ECO:0000312|MGI:MGI:1346834}

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:[14766742](#), PubMed:[15831456](#), PubMed:[15976031](#), PubMed:[29443959](#), PubMed:[38409506](#), PubMed:[38977846](#), PubMed:[39361745](#)). Ligand-binding causes conformational change which causes recruitment of coactivators, promoting target gene activation (PubMed:[15976031](#)). The specific ligand is unknown, but specific phospholipids, such as phosphatidylethanolamine, phosphatidylserine, dilauroyl phosphatidylcholine and diundecanoyl phosphatidylcholine can act as ligand in vitro (PubMed:[15976031](#)). 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 (PubMed:[15014077](#), PubMed:[15831456](#), PubMed:[34397088](#), PubMed:[36423263](#), PubMed:[37935903](#), PubMed:[38243114](#), PubMed:[38386558](#), PubMed:[39361745](#)). Plays a minor role in zygotic genome activation (ZGA) by regulating a small set of two-cell stage genes (PubMed:[36423263](#), PubMed:[39361745](#)). 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 (PubMed:[37935903](#), PubMed:[38386558](#), PubMed:[39361745](#)). 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 (PubMed:[39361745](#)). Also involved in the epiblast stage of development and embryonic stem cell pluripotency, by promoting expression of POU5F1/OCT4 (PubMed:[15831456](#), PubMed:[20096661](#), PubMed:[27984042](#), PubMed:[34397088](#), PubMed:[38386558](#)). 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 (PubMed:[27447294](#), PubMed:[33441767](#), PubMed:[35192609](#), PubMed:[36905926](#)). Involved in exocrine pancreas development and acinar cell differentiation (PubMed:[21852532](#), PubMed:[25063451](#), PubMed:[29443959](#)). Acts as an essential transcriptional regulator of lipid metabolism (By similarity). Key regulator of cholesterol 7-alpha-hydroxylase gene (CYP7A) expression in liver (By similarity). Activates the transcription of CYP2C38 (PubMed:[30555544](#)). Also acts as a negative regulator of inflammation in different organs, such as intestine, liver and pancreas (PubMed:[17670946](#), PubMed:[29443959](#), PubMed:[30305617](#)). Protects against intestinal inflammation via its ability to regulate glucocorticoid production (PubMed:[16923850](#), PubMed:[17670946](#)). 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 (By similarity). Acts as a regulator of immunity by promoting lymphocyte T- cell development, proliferation and effector functions (PubMed:[31328159](#)). Also involved in resolution of endoplasmic reticulum stress in the liver (PubMed:[24737860](#)).

Cellular Location

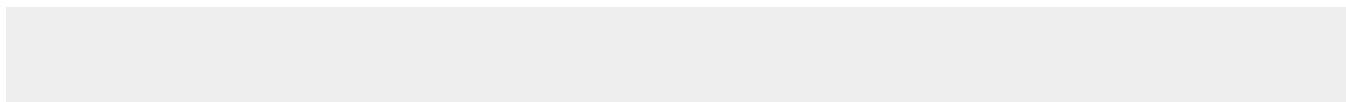
Nucleus. Chromosome

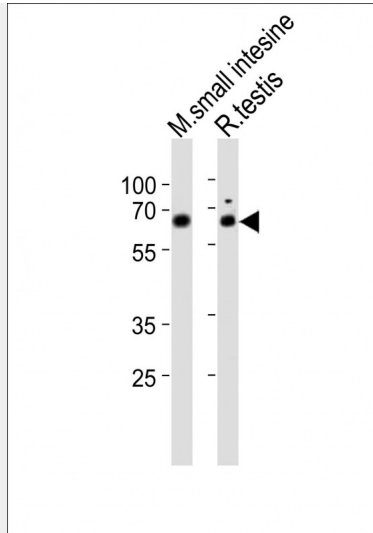
Mouse Nr5a2 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Mouse Nr5a2 Antibody (Center) - Images





All lanes : Anti-Nr5a2 Antibody (Center) at 1:1000 dilution Lane 1: mouse small intestine lysates Lane 2: rat testis lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 64 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

Mouse Nr5a2 Antibody (Center) - Background

Binds to promoters containing the sequence element 5'- AACGACCGACCTTGAG-3'. Plays a role in the regulation of gene expression in liver and pancreas. May play a role in embryonic development (By similarity).

Mouse Nr5a2 Antibody (Center) - References

Tugwood J.D.,et al.Submitted (FEB-1992) to the EMBL/GenBank/DDBJ databases.
Sablin E.P.,et al.Mol. Cell 11:1575-1585(2003).
Li Y.,et al.Proc. Natl. Acad. Sci. U.S.A. 102:9505-9510(2005).

Mouse Nr5a2 Antibody (Center) - Citations

- [Liver Receptor Homolog-1 Regulates Organic Anion Transporter 2 and Docetaxel Pharmacokinetics.](#)
- [REV-ERBa Regulates CYP7A1 through Repression of Liver Receptor Homolog-1.](#)