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NR1H3 / LXR Alpha Antibody (N-Terminus)

Rabbit Polyclonal Antibody

Catalog # ALS13548

Specification

NR1H3 / LXR Alpha Antibody (N-Terminus) - Product Information

Application	**IF, WB, IHC**
Primary Accession	Q13133
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**50kDa KDa**

NR1H3 / LXR Alpha Antibody (N-Terminus) - Additional Information

Gene ID 10062

Other Names
Oxysterols receptor LXR-alpha, Liver X receptor alpha, Nuclear receptor subfamily 1 group H member 3, NR1H3, LXRA

Target/Specificity
Human NR1H3

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions
NR1H3 / LXR Alpha Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

NR1H3 / LXR Alpha Antibody (N-Terminus) - Protein Information

Name NR1H3

Synonyms LXRA

Function
Nuclear receptor that exhibits a ligand-dependent transcriptional activation activity (PubMed:19481530, PubMed:25661920). Interaction with retinoic acid receptor (RXR) shifts RXR from its role as a silent DNA-binding partner to an active ligand-binding subunit in mediating retinoid responses through target genes defined by LXRES (By similarity). LXRES are DR4-type response elements characterized by direct repeats of two similar hexanuclotide half-sites spaced by four nucleotides (By similarity). Plays an important role in the regulation of cholesterol homeostasis, regulating cholesterol uptake through MYLIP-dependent ubiquitination of LDLR, VLDLR and LRP8 (PubMed:19481530). Interplays

functionally with RORA for the regulation of genes involved in liver metabolism (By similarity). Induces LPCAT3- dependent phospholipid remodeling in endoplasmic reticulum (ER) membranes of hepatocytes, driving SREBF1 processing and lipogenesis (By similarity). Via LPCAT3, triggers the incorporation of arachidonate into phosphatidylcholines of ER membranes, increasing membrane dynamics and enabling triacylglycerols transfer to nascent very low-density lipoprotein (VLDL) particles. Via LPCAT3 also counteracts lipid-induced ER stress response and inflammation, likely by modulating SRC kinase membrane compartmentalization and limiting the synthesis of lipid inflammatory mediators (By similarity).

Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:25661920}. Cytoplasm {ECO:0000250|UniProtKB:Q9Z0Y9}

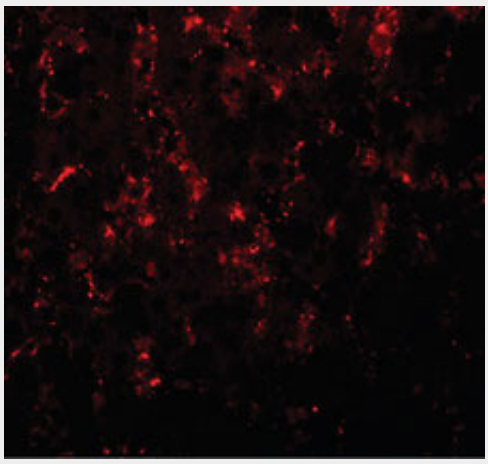
Tissue Location
Visceral organs specific expression. Strong expression was found in liver, kidney and intestine followed by spleen and to a lesser extent the adrenals

NR1H3 / LXR Alpha Antibody (N-Terminus) - 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

NR1H3 / LXR Alpha Antibody (N-Terminus) - Images



Immunofluorescence of LXR-A in rat liver tissue with LXR-A antibody at 20 ug/ml.

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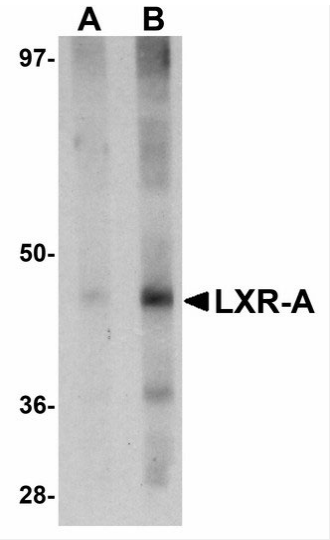
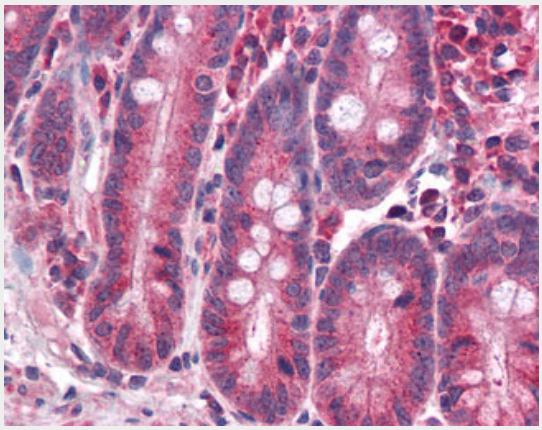


Western blot of LXR-A in rat liver tissue lysate with LXR-A antibody at (A) 1 and (B) 2 ug/ml.



Anti-NR1H3 / LXR Alpha antibody IHC of human small intestine.

NR1H3 / LXR Alpha Antibody (N-Terminus) - Background

Nuclear receptor. Interaction with RXR shifts RXR from its role as a silent DNA-binding partner to an active ligand- binding subunit in mediating retinoid responses through target genes defined by LXRES. LXRES are DR4-type response elements characterized by direct repeats of two similar hexanuclotide half- sites spaced by four nucleotides. Plays an important role in the regulation of cholesterol homeostasis, regulating cholesterol uptake through MYLIP-dependent ubiquitination of LDLR, VLDLR and LRP8. Interplays functionally with RORA for the regulation of genes involved in liver metabolism (By similarity).

NR1H3 / LXR Alpha Antibody (N-Terminus) - References

Willy P.J.,et al.Genes Dev. 9:1033-1045(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Taylor T.D.,et al.Nature 440:497-500(2006).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.