

## Goat Anti-LXR alpha / LXR beta Antibody

Peptide-affinity purified goat antibody Catalog # AF1638a

## **Specification**

## Goat Anti-LXR alpha / LXR beta Antibody - Product Information

Application WB
Primary Accession P55055

Other Accession NP\_009052, 10062, 7376
Reactivity Human, Mouse, Rat

Predicted Dog
Host Goat
Clonality Polyclonal
Concentration 0.5mg/ml
Isotype IgG
Calculated MW 50974

# Goat Anti-LXR alpha / LXR beta Antibody - Additional Information

#### **Gene ID 7376**

### **Other Names**

Oxysterols receptor LXR-beta, Liver X receptor beta, Nuclear receptor NER, Nuclear receptor subfamily 1 group H member 2, Ubiquitously-expressed nuclear receptor, NR1H2, LXRB, NER, UNR

#### **Format**

0.5~mg lgG/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-LXR alpha / LXR beta Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-LXR alpha / LXR beta Antibody - Protein Information

#### Name NR1H2

Synonyms LXRB, NER, UNR

# **Function**

Nuclear receptor that exhibits a ligand-dependent transcriptional activation activity (PubMed:<a href="http://www.uniprot.org/citations/25661920" target="\_blank">25661920</a>). Binds preferentially to double-stranded oligonucleotide direct repeats having the consensus half-site



sequence 5'-AGGTCA-3' and 4-nt spacing (DR-4). Regulates cholesterol uptake through MYLIP-dependent ubiquitination of LDLR, VLDLR and LRP8; DLDLR and LRP8. 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 (By similarity). 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). 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:<a href="http://www.uniprot.org/citations/20159957" target="blank">20159957</a>/a>).

#### **Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407}.

Tissue Location Ubiquitous.

### Goat Anti-LXR alpha / LXR beta Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

# Goat Anti-LXR alpha / LXR beta Antibody - Images



AF1638a (1  $\mu$ g/ml) staining of human spleen lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

## Goat Anti-LXR alpha / LXR beta Antibody - Background

The liver X receptors, LXRA and LXRB (NR1H2; MIM 600380), form a subfamily of the nuclear receptor superfamily and are key regulators of macrophage function, controlling transcriptional programs involved in lipid homeostasis and inflammation. The inducible LXRA is highly expressed in liver, adrenal gland, intestine, adipose tissue, macrophages, lung, and kidney, whereas LXRB is





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ubiquitously expressed. Ligand-activated LXRs form obligate heterodimers with retinoid X receptors (RXRs; see MIM 180245) and regulate expression of target genes containing LXR response elements (summary by Korf et al., 2009 [PubMed 19436111]).

## Goat Anti-LXR alpha / LXR beta Antibody - References

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. Activation of liver X receptor sensitizes human dendritic cells to inflammatory stimuli. T□r□csik D, et al. J Immunol, 2010 May 15. PMID 20410489. LXR activation inhibits chemokine-induced CD4-positive lymphocyte migration. Walcher D, et al. Basic Res Cardiol, 2010 Jul. PMID 20364260. New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496. Liver X Receptor activation downregulates AKT survival signaling in lipid rafts and induces apoptosis of prostate cancer cells. Pommier AJ, et al. Oncogene, 2010 May 6. PMID 20190811.

Goat Anti-LXR alpha / LXR beta Antibody - Citations • Macrophages engulfing apoptotic cells produce nonclassical retinoids to enhance their phagocytic capacity.