

# LXRα Polyclonal Antibody

Catalog # AP73326

# **Product Information**

Application	WB, IHC-P
Primary Accession	<u>Q13133</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50396

#### **Additional Information**

Gene ID	10062
Other Names	NR1H3; LXRA; Oxysterols receptor LXR-alpha; Liver X receptor alpha; Nuclear receptor subfamily 1 group H member 3
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

### **Protein Information**

Name	NR1H3
Synonyms	LXRA
Function	Nuclear receptor that exhibits a ligand-dependent transcriptional activation activity (PubMed: <u>19481530</u> , PubMed: <u>25661920</u> , PubMed: <u>37478846</u> ). 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 (PubMed: <u>37478846</u> ). 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: <u>19481530</u> ). 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

## Background

Nuclear receptor that exhibits a ligand-dependent transcriptional activation activity (PubMed: <u>19481530</u>, PubMed:<u>25661920</u>). 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:<u>19481530</u>). Interplays functionally with RORA for the regulation of genes involved in liver metabolism (By similarity).

#### Images



Western Blot analysis of HeLa cells using LXRα Polyclonal Antibody. Antibody was diluted at 1:500. Secondary antibody was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100

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Immunohistochemical analysis of paraffin-embedded mouse-brain, antibody was diluted at 1:100

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Immunohistochemical analysis of paraffin-embedded mouse-brain, antibody was diluted at 1:100

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