

**NR1H3 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9952a****Specification**

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**NR1H3 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [O13133](#)**NR1H3 Antibody (Center) Blocking Peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**NR1H3 Antibody (Center) Blocking Peptide - Protein Information****Name** NR1H3**Synonyms** LXRA**Function**

Nuclear receptor that exhibits a ligand-dependent transcriptional activation activity (PubMed:<a href="http://www.uniprot.org/citations/19481530" target="\_blank">19481530</a>, PubMed:<a href="http://www.uniprot.org/citations/25661920" target="\_blank">25661920</a>). 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:<a href="http://www.uniprot.org/citations/19481530" target="\_blank">19481530</a>). 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 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**NR1H3 Antibody (Center) Blocking Peptide - Images****NR1H3 Antibody (Center) Blocking Peptide - Background**

NR1H3 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 LXRβ is 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.

**NR1H3 Antibody (Center) Blocking Peptide - References**

Davila, S., et al. Genes Immun. 11(3):232-238(2010)Nedumaran, B., et al. J. Biol. Chem. 285(12):9221-9232(2010)Zhao, C., et al. J. Endocrinol. 204(3):233-240(2010)Anthonisen, E.H., et al. J. Biol. Chem. 285(3):1607-1615(2010)