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Anti-LXR Alpha Antibody
Catalog # ABO10621

Specification

Anti-LXR Alpha Antibody - Product Information

Application	**WB**
Primary Accession	Q13133
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Oxysterols receptor LXR-alpha(NR1H3) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-LXR Alpha Antibody - 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

Calculated MW
50396 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Nucleus .

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

Protein Name
Oxysterols receptor LXR-alpha

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human LXR alpha(375-398aa QVERLQHTYVEALHAYVSINHPHD), identical to the related rat and mouse sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the nuclear hormone receptor family. NR1 subfamily.

Anti-LXR Alpha Antibody - Protein Information

Name NR1H3

Synonyms LXRA

Function
Nuclear receptor that exhibits a ligand-dependent transcriptional activation activity (PubMed:19481530, PubMed:25661920, PubMed:37478846). 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:37478846). 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

Anti-LXR Alpha Antibody - Protocols

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

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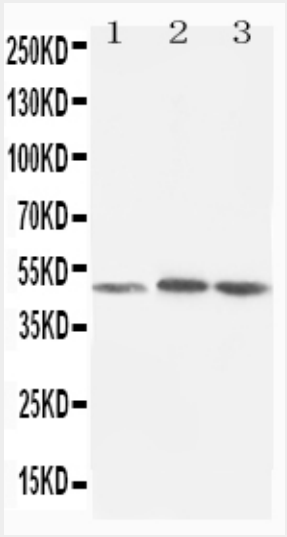
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-LXR Alpha Antibody - Images



Anti-LXR alpha antibody, ABO10621, Western blottingLane 1: Rat Liver Tissue LysateLane 2: MCF-7 Cell Lysate Lane 3: HELA Cell Lysate

Anti-LXR Alpha Antibody - Background

LXRA is a tissue-specific cofactor that permits RXRA to function as a potent 9cRA receptor with a distinct target gene specificity. It specifically interacts with RXRA in vivo to form a functional heterodimer in which RXRA is the ligand-binding subunit. Additionally, LXR activity is critical for physiologic lipid metabolism and transport. LXRs are endogenous inhibitors of atherogenesis and are targets for therapeutic intervention in cardiovascular disease. Furthermore, LXRs and their ligands are negative regulators of macrophage inflammatory gene expression. LXR is also found that as a transcriptional switch that integrates hepatic glucose metabolism and fatty acid synthesis. The LXR-IDOL-LDLR axis defines a complementary pathway to sterol response element-binding proteins for sterol regulation of cholesterol uptake.