10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-LXR Alpha Antibody

Catalog # ABO10621

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.

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
Application Details	Western blot, 0.1-0.5 □g/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.
Source	Eukaryota
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.

Protein Information

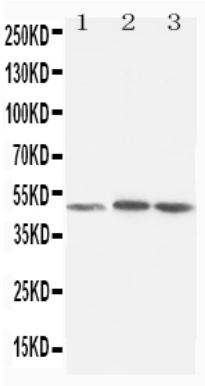
Name	NR1H3
Synonyms	LXRA
Function	Nuclear receptor that exhibits a ligand-dependent transcriptional activation activity (PubMed:19481530, PubMed:25661920, PubMed:37478846). Interaction with retinoic acid receptor (RXR) shifts RXR from its role as a silent DNA-binding partner to an active ligand- binding 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

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.

Images

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.