

LXR-B Antibody

Catalog # ASC11054

Product Information

Application	WB, E
Primary Accession	P55055
Other Accession	P55055 , 1709254
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	50974
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	LXR-B antibody can be used for detection of LXR-B by Western blot at 1 - 2 μ g/mL.

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, LXR β , NER, UNR
Target/Specificity	NR1H2;
Reconstitution & Storage	LXR-B antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	LXR-B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NR1H2
Synonyms	LXR β , NER, UNR
Function	Nuclear receptor that exhibits a ligand-dependent transcriptional activation activity (PubMed: 25661920). 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:[20159957](#)).

Cellular Location

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

Tissue Location

Ubiquitous.

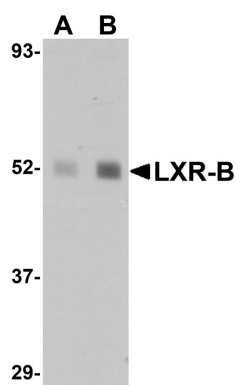
Background

LXR-B Antibody: LXR-B belongs to the Liver X Receptor family that encodes highly homologous transcription factors. Like the highly homologous LXR-A, LXR-B forms heterodimers with the retinoic acid receptor RXRalpha, which function as sensors for cellular oxysterols which when activated, increase the expression of genes that control sterol and fatty acid metabolism and homeostasis. Recent experiments have indicated that the LXRs can also modulate both innate and adaptive immune responses. Other studies suggest that genetic variability at the LXR-B gene locus may be a risk factor for Alzheimer's disease. One hypothesis postulates that LXR may be upstream of ApoE and potentiates the risk associated effects of the epsilon3 allele.

References

Willy PJ, Umesono K, Ong ES, et al. LXR, a nuclear receptor that defines a distinct retinoid response pathway. *Genes Dev.*1995; 9:1033-45.
Edwards PA, Kennedy MA, and Mak PA. LXRs; Oxysterol-activated nuclear receptors that regulate genes controlling lipid homeostasis. *Vasc. Pharmacol.*2002; 38:249-56.
Bensinger SJ and Tontonoz P. Integration of metabolism and inflammation by lipid-activated nuclear receptors. *Nature*2008; 454:470-7.
Adighibe O, Arepalli S, Duckworth J, et al. Genetic variability at the LXR gene (NR1H2) may contribute to the risk of Alzheimer's disease. *Neurobiol. Aging*2006; 27:1431-4.

Images



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