

Active Recombinant Human NR1H3, His-tagged

Cat. No. NR1H3-2504H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human His tagged LXR α is isolated from an <i>E. coli</i> strain that carries the coding sequence of the human LXR α under the control of a T7 promoter. 56 kDa.
Species	Human
Source	E.coli
Description	Liver X receptors (LXRs) are nuclear receptors that regulate the metabolism of cholesterol and bile acids. There are two subtypes of LXRs, LXR α and LXR β . LXR α is preferentially expressed in liver, small intestine, kidney and spleen. In contrast, LXR β expression is ubiquitous. The genomic structure and the promoter regions of the two LXR genes contain specific regulatory sites, which suggest that LXRs may have physiological roles in the immune system. Like other nuclear receptors, LXRs heterodimerize with retinoid X receptor (RXR) for function. LXRs are activated by naturally occurring oxysterols and regulate the expression of target genes, including ATP binding cassette transporter 1 (ABC1), ATP binding cassette transporter 8 (ABC8) and cholesterol ester transfer protein (CETP). LXR α is thought to play a major role in the control of cholesterol catabolism by stimulating the expression of cholesterol 7 α -hydroxylase (CYP7A1), the rate limiting enzyme of bile acid synthesis.
Applications	LXR can be used for DNA and protein-protein interactions assays.
Activity	1 unit equals 1 nanogram of purified protein. 20 units are sufficient for a gel-mobility

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shift assay and 100 units are sufficient for a protein-protein interaction assay.

Transcript Variant This variant represents the longest transcript and encodes the longest isoform (a).

Quality Control The purified recombinant protein is greater than 95% homogeneous based on SDS-PAGE analysis.

Reagents Supplied 1x dilution buffer A: 20 mM Tris-Cl (pH 8.0), 20% Glycerol, 100 mM KCl, 0.2 mM EDTA and 1mM DTT.

Storage Conditions Store at -80°C.

Pathways PPAR signaling pathway; Gene Expression; Metabolism of lipids and lipoproteins

GENE INFORMATION

Gene Name NR1H3 nuclear receptor subfamily 1, group H, member 3 [Homo sapiens]

Synonyms NR1H3; nuclear receptor subfamily 1, group H, member 3; LXRA; LXR-a; RLD-1; OTTHUMP00000198038; liver X receptor alpha; liver X receptor, alpha; liver X receptor-alpha; TLS/CHOP; Nuclear receptor subfamily 1 group H member 3; Nuclear orphan receptor LXR-alpha

Gene ID 10062

mRNA Refseq NM_001130101

Protein Refseq NP_001123573

MIM 602423

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UniProt ID	Q13133
Chromosome Location	11p11.2
Function	metal ion binding; protein binding; sequence-specific DNA binding; thyroid hormone receptor activity; transcription coactivator activity; zinc ion binding; steroid hormone receptor activity
PDB rendering based on 1uhl.	