Active Recombinant Human NR1H2, Animal Free

Cat. No. NR1H2-133H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human LXR beta- LBD is a protein composed of 31.9 kDa (201-461 amino acids). Human recombinant protein expressed in Nicotiana benthamiana. Recombinant human Liver X receptor Beta-BDL contains a 6-His-tag at the N-terminal end, is produced by transient expression in non-transgenic plants and is purified by sequential chromatography (FPLC). This product contains no animal–derived components or impurities. Animal free product.
Species	Human
Source	Nicotiana Benthamiana
ProteinLength	201-461 a.a.
Description	Liver X Receptors (LXRs) are nuclear receptors that regulate the metabolism of cholesterol and bile acids. There are two subtypes, LXRα and LXRbeta. The LXRs are ligand-dependent transcription factors that form permissive heterodimers with the retinoid X receptor (RXR). LXR-member of Nuclear Receptor Family is activated by certain oxysterol derivatives of cholesterol. They play an important role in cholesterol, lipid, and carbohydrate metabolism and are critical for the control of lipid homeostasis.. LXRα is highly expressed in liver tissue. They respond to elevated cholesterol levels via transactivation of genes involved in sterol transport (ABCA1, ABCG1, ABCG5, and ABCG8), cholesterol efflux and high-density lipoprotein (HDL) metabolism, and sterol catabolism (CYP7A1). They also play a central role in regulating cellular lipid content through activation of SREBP-1c, which is the master

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	regulator of de novo lipogenesis. LXRs were found to upregulate angiopoietin- like protein 3 (Angpf13), a member of the family of vascular endothelial growth factors that is also a key regulator of lipid metabolism. LXRs serve as cholesterol sensors that regulate the expression of multiple genes involved in the efflux, transport, and excretion of cholesterol. Synthetic LXR agonists inhibit the development of atherosclerosis in murine models. These observations identify the LXR pathway as a potential target for therapeutic intervention in human cardiovascular disease.
Form	Lyophilized from a Tris HCl 20mM buffer at pH 8, 0.1% SDS.
Bio-activity	Recombinant Human Liver X receptor beta- LBD is applied in protein-protein interaction assays.
Molecular Mass	Recombinant human LXR beta- LBD is a protein composed of 31.9 kDa (201-461 amino acids).
AA Sequence	HHHHHHSSGIEGRGRLIKHMTPGGSEAGSQGSGEGEGVQLTAAQELMIQQLVAAQ LQCNKRSFSDQPKVTPWPLG ADPQSRDARQQRFAHFTELAIISVQEIVDFAKQVPG FLQLGREDQIALLKASTIEIMLLETARRYNHETECITFL KDFTYSKDDFHRAGLQVEFI NPIFEFSRAMRRLGLDDAEYALLIAINIFSADRPNVQEPGRVEALQQPYVEALLS YTR IKRPQDQLRFPRMLMKLVSLRTLSSVH
Endotoxin	< 0.04="" eu="" ug="" protein="" (lal="">
Purity	>97% by SDS-PAGE gel
Applications	Western blot, Immunogen
Storage	This lyophilized preparation is stable at 2-8o C for short term, long storage it should be kept at -20oC. Reconstituted protein should be stored in working aliquots at –20°C

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	and it is recommended to add a carrier protein (0.1% HSA or BSA). Repeated freezing and thawing is not recommended.
Reconstitution	Lyophilized protein should be reconstituted in water to a concentration of 50 ng/ul. Upon reconstitution, It can be stored in working aliquots at –20°C for future use. Optimal reconstitution please follow batch Quality Control sheet instructions.

GENE INFORMATION

Gene Name	NR1H2 nuclear receptor subfamily 1, group H, member 2 [Homo sapiens]
Official Symbol	NR1H2
Synonyms	NR1H2; nuclear receptor subfamily 1, group H, member 2; ubiquitously expressed nuclear receptor , UNR; oxysterols receptor LXR-beta; liver X receptor beta; LXR b; NER; NER I; RIP15; LX receptor beta; nuclear receptor NER; liver X nuclear receptor beta; nuclear orphan receptor LXR-beta; steroid hormone-nuclear receptor NER; ubiquitously-expressed nuclear receptor; UNR; LXRB; LXR-b; NER-I; FLJ17564;
Gene ID	7376
mRNA Refseq	NM_001256647
Protein Refseq	NP_001243576
MIM	600380
UniProt ID	P55055
Chromosome Location	19q13.3

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Pathway	Gene Expression, organism-specific biosystem; Generic Transcription Pathway, organism-specific biosystem; Nuclear Receptor transcription pathway, organism-specific biosystem; Nuclear Receptors, organism-specific biosystem;
Function	DNA binding; ligand-activated sequence-specific DNA binding RNA polymerase II transcription factor activity; metal ion binding; protein binding; receptor activity; retinoid X receptor binding; sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity; steroid hormone receptor activity; zinc ion binding;

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