

## Active Recombinant Human RXRA, Ligand Binding Domain, GST-tagged

Cat. No. RXRA-1152H Lot. No. (See product label)

### SPECIFICATION

**Species** Human

**Source** E.coli

**ProteinLength** LBD

#### Description

Retinoid X Receptor (RXR) serves as a promiscuous heterodimerization partner for many nuclear receptors through the identity box, a 40-amino acid subregion within the ligand binding domain (LBD). RXR partners include Thyroid Hormone Receptors (TRs), Retinoic Acid Receptors (RARs), Peroxisome Proliferator-activated Receptor, several constitutive active orphan nuclear receptors (e.g. Nuclear Growth Factor I-B), oxysterol receptors, and constitutive androstane receptors. RXRs also form homodimers to mediate the effects of 9-cis-retinoic acid (9-cRA). Depending on these protein-protein interactions, RXR-containing complexes have distinct ligand-dependent and constitutive functions. The LBD is functionally complex and mediates ligand binding, receptor homo- and heterodimerization, repression of transcription in the absence of ligand, and ligand-dependent activation of transcription. Hormone binding to the structurally conserved LBD of the RXR triggers a conformational change that principally affects the conserved C-terminal transactivation helix H12 involved in transcriptional activation. Coactivators directly recruited by liganded receptors include members of the steroid receptor coactivator/p160 family such as SRC-1, transcriptional intermediary factor 2/glucocorticoid receptor interacting protein 1, and RAC3/activator of thyroid and retinoic acid receptors/amplified in breast cancer

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1. Recombinant GST-RXR-LBD is isolated from an E.coli strain that carries the coding sequence of the human RXR-LBD under the control of a T7 promoter.

**Form**

Liquid. Supplied in 20mM Tris-HCl pH8.0, 100 mM KCl, 0.2mM EDTA, 1mM DTT and 20% glycerol.

**Activity**

100ng are sufficient for a protein-protein interaction assay.

**Application**

GST-RXR-LBD has been applied in DNA and protein-protein interaction assays.

**Purity**

>95% by SDS-PAGE.

**Usage**

For in vitro use only.

**Storage**

Quality guaranteed for 12 months, store at -80°C. Avoid freeze / thaw cycles.

## GENE INFORMATION

**Gene Name**

[RXRA retinoid X receptor, alpha \[ Homo sapiens \]](#)

**Synonyms**

RXRA; FLJ00280; FLJ00318; FLJ16020; FLJ16733; MGC102720; NR2B1; OTTHUMP00000022510; Retinoid X receptor alpha; retinoid X receptor, alpha; Nuclear receptor subfamily 2 group B member 1; Retinoid X receptor, alpha; Retinoid X receptor alpha (RXR-alpha).

**Gene ID**

[6256](#)

**mRNA Refseq**

[NM\\_002957](#)


**Protein Refseq**

[NP\\_002948](#)

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<b>MIM</b>	180245
<b>UniProt ID</b>	P19793
<b>Chromosome Location</b>	9q34.3
<b>Pathway</b>	Adipocytokine signaling pathway; Non-small cell lung cancer; PPAR signaling pathway; Small cell lung cancer; Thyroid cancer.
<b>Function</b>	ligand-regulated transcription factor activity; metal ion binding; protein binding; retinoid-X receptor activity; sequence-specific DNA binding; steroid binding; steroid hormone receptor activity; transcription coactivator activity; transcription factor activity; vitamin D receptor binding; vitamin D response element binding; zinc ion binding.
<b>PDB rendering based on 1by4.</b>	

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