

Product datasheet

Recombinant Human Retinoid X Receptor alpha/RXRA protein ab48737

1 Image

Overview

Product name	Recombinant Human Retinoid X Receptor alpha/RXRA protein
Protein length	Protein fragment

Description

Nature	Recombinant
Source	Escherichia coli
Amino Acid Sequence	
Species	Human
Sequence	MLGLNGVLKV PAHPSGNMAS FTKHICAICG DRSSGKHYGV YSCEGCKGFF KRTVRKDLTY TCRDNKDCLI DKRQRNRCQY CRYQKCLAMG MKREAVQEER QRGKDRNENE VESTSSANE
Amino acids	111 to 228

Specifications

Our [Abpromise guarantee](#) covers the use of **ab48737** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Purity	> 95 % SDS-PAGE. The Retinoid X Receptor alpha/RXRA protein (111-228aa) was over expressed in E.coli and purified by using conventional column chromatography techniques.
Form	Liquid
Additional notes	This product was previously labelled as Retinoid X Receptor alpha

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
------------------------------	---

pH: 7.50

Constituents: 0.039% Beta mercaptoethanol, 0.316% Tris HCl, 0.58% Sodium chloride

General Info

Function

Receptor for retinoic acid. Retinoic acid receptors bind as heterodimers to their target response elements in response to their ligands, all-trans or 9-cis retinoic acid, and regulate gene expression in various biological processes. The RAR/RXR heterodimers bind to the retinoic acid response elements (RARE) composed of tandem 5'-AGGTCA-3' sites known as DR1-DR5. The high affinity ligand for RXRs is 9-cis retinoic acid. RXRA serves as a common heterodimeric partner for a number of nuclear receptors. The RXR/RAR heterodimers bind to the retinoic acid response elements (RARE) composed of tandem 5'-AGGTCA-3' sites known as DR1-DR5. In the absence of ligand, the RXR-RAR heterodimers associate with a multiprotein complex containing transcription corepressors that induce histone acetylation, chromatin condensation and transcriptional suppression. On ligand binding, the corepressors dissociate from the receptors and associate with the coactivators leading to transcriptional activation. The RXRA/PPARA heterodimer is required for PPARA transcriptional activity on fatty acid oxidation genes such as ACOX1 and the P450 system genes.

Tissue specificity

Highly expressed in liver, also found in lung, kidney and heart.

Sequence similarities

Belongs to the nuclear hormone receptor family. NR2 subfamily.
Contains 1 nuclear receptor DNA-binding domain.

Domain

Composed of three domains: a modulating N-terminal domain (AF1 domain), a DNA-binding domain and a C-terminal ligand-binding domain (AF2 domain).

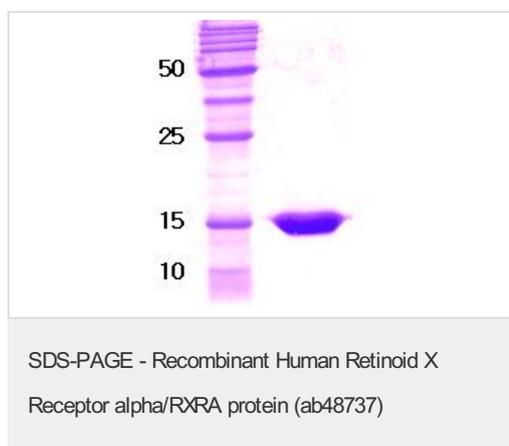
Post-translational modifications

Phosphorylated on serine and threonine residues mainly in the N-terminal modulating domain. Constitutively phosphorylated on Ser-21 in the presence or absence of ligand. Under stress conditions, hyperphosphorylated by activated JNK on Ser-56, Ser-70, Thr-82 and Ser-260 (By similarity). Phosphorylated on Ser-27, in vitro, by PKA. This phosphorylation is required for repression of cAMP-mediated transcriptional activity of RARA.
Sumoylation negatively regulates transcriptional activity. Desumoylated specifically by SENP6.

Cellular localization

Nucleus.

Images



14% SDS-PAGE gel loaded with recombinant human Retinoid X Receptor alpha/RXRA protein.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors