abcam

Product datasheet

Recombinant Human Retinoid X Receptor alpha/RXRA protein ab48737

1 Image

Description

Product name	Recombinant Human Retinoid X Receptor alpha/RXRA protein
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.
Expression system	Escherichia coli
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
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
Form	Liquid
Additional notes	This product was previously labelled as Retinoid X Receptor alpha

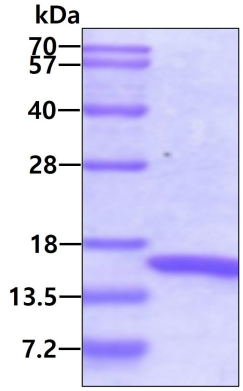
Preparation and Storage

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. Constiutively 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



SDS-PAGE - Recombinant Human Retinoid X Receptor alpha/RXRA protein (ab48737)

3ug of ab48737 by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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