


Product datasheet

Anti-Retinoid X Receptor alpha/RXRA antibody ab227273

3 Images

Overview

Product name	Anti-Retinoid X Receptor alpha/RXRA antibody
Description	Rabbit polyclonal to Retinoid X Receptor alpha/RXRA
Host species	Rabbit
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Rat, Human Predicted to work with: Mouse, Cow 
Immunogen	Recombinant fragment within Human Retinoid X Receptor alpha/RXRA (internal sequence). The exact sequence is proprietary. Database link: P19793
Positive control	WB: Rat liver tissue lysate; HepG2 whole cell lysate. IP: MCF7 whole cell extract.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 78.99% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab227273 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/500 - 1/10000. Predicted molecular weight: 51 kDa.
IP		1/100 - 1/500.

Target

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).

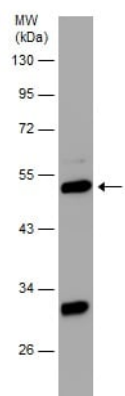
Post-translational modifications

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



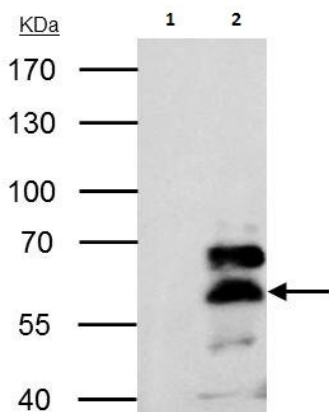
Western blot - Anti-Retinoid X Receptor alpha/RXRA antibody (ab227273)

Anti-Retinoid X Receptor alpha/RXRA antibody (ab227273) at 1/500 dilution + Rat liver tissue lysate at 30 µg

Developed using the ECL technique.

Predicted band size: 51 kDa

10% SDS-PAGE

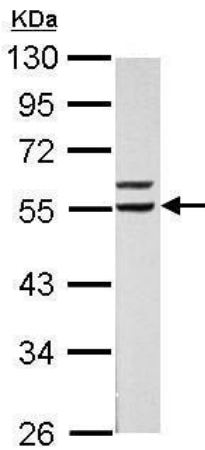


Immunoprecipitation - Anti-Retinoid X Receptor alpha/RXRA antibody (ab227273)

Retinoid X Receptor alpha/RXRA was immunoprecipitated from MCF7 (human breast adenocarcinoma cell line) whole cell extract with 4 µg ab227273. Western blot was performed from the immunoprecipitate using ab227273 at 1/500 dilution.

Lane 1: Control IgG IP in MCF7 whole cell extract.

Lane 2: ab227273 IP in MCF7 whole cell extract.



Western blot - Anti-Retinoid X Receptor alpha/RXRA antibody (ab227273)

Anti-Retinoid X Receptor alpha/RXRA antibody (ab227273) at 1/5000 dilution + HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate at 30 µg

Developed using the ECL technique.

Predicted band size: 51 kDa

10% SDS-PAGE

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