

**Retinoid X Receptor alpha Antibody**  
Rabbit mAb  
Catalog # AP91969**Specification**

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**Retinoid X Receptor alpha Antibody - Product Information**

Application	WB, ICC, IP
Primary Accession	<a href="#">P19793</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
NR2B1; RXR alpha1; Rxra; RXRalpha1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	50811 Da

**Retinoid X Receptor alpha Antibody - Additional Information**

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Retinoid X Receptor alpha
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**Retinoid X Receptor alpha Antibody - Protein Information****Name** RXRA**Synonyms** NR2B1**Function**

Receptor for retinoic acid that acts as a transcription factor (PubMed: [11162439](http://www.uniprot.org/citations/11162439), PubMed: [11915042](http://www.uniprot.org/citations/11915042), PubMed: [37478846](http://www.uniprot.org/citations/37478846)). Forms homo- or heterodimers with retinoic acid receptors (RARs) and binds to target response elements in response to their ligands, all-trans or 9- cis retinoic acid, to regulate gene expression in various biological processes (PubMed: [10195690](http://www.uniprot.org/citations/10195690), PubMed: [11162439](http://www.uniprot.org/citations/11162439))

target="\_blank">11162439</a>, PubMed:<a href="http://www.uniprot.org/citations/11915042" target="\_blank">11915042</a>, PubMed:<a href="http://www.uniprot.org/citations/16107141" target="\_blank">16107141</a>, PubMed:<a href="http://www.uniprot.org/citations/17761950" target="\_blank">17761950</a>, PubMed:<a href="http://www.uniprot.org/citations/18800767" target="\_blank">18800767</a>, PubMed:<a href="http://www.uniprot.org/citations/19167885" target="\_blank">19167885</a>, PubMed:<a href="http://www.uniprot.org/citations/28167758" target="\_blank">28167758</a>, PubMed:<a href="http://www.uniprot.org/citations/37478846" target="\_blank">37478846</a>). The RAR/RXR heterodimers bind to the retinoic acid response elements (RARE) composed of tandem 5'-AGGTCA-3' sites known as DR1-DR5 to regulate transcription (PubMed:<a href="http://www.uniprot.org/citations/10195690" target="\_blank">10195690</a>, PubMed:<a href="http://www.uniprot.org/citations/11162439" target="\_blank">11162439</a>, PubMed:<a href="http://www.uniprot.org/citations/11915042" target="\_blank">11915042</a>, PubMed:<a href="http://www.uniprot.org/citations/17761950" target="\_blank">17761950</a>, PubMed:<a href="http://www.uniprot.org/citations/28167758" target="\_blank">28167758</a>). The high affinity ligand for retinoid X receptors (RXRs) is 9-cis retinoic acid (PubMed:<a href="http://www.uniprot.org/citations/1310260" target="\_blank">1310260</a>). In the absence of ligand, the RXR-RAR heterodimers associate with a multiprotein complex containing transcription corepressors that induce histone deacetylation, chromatin condensation and transcriptional suppression (PubMed:<a href="http://www.uniprot.org/citations/20215566" target="\_blank">20215566</a>). On ligand binding, the corepressors dissociate from the receptors and coactivators are recruited leading to transcriptional activation (PubMed:<a href="http://www.uniprot.org/citations/20215566" target="\_blank">20215566</a>, PubMed:<a href="http://www.uniprot.org/citations/37478846" target="\_blank">37478846</a>, PubMed:<a href="http://www.uniprot.org/citations/9267036" target="\_blank">9267036</a>). Serves as a common heterodimeric partner for a number of nuclear receptors, such as RARA, RARB and PPARA (PubMed:<a href="http://www.uniprot.org/citations/10195690" target="\_blank">10195690</a>, PubMed:<a href="http://www.uniprot.org/citations/11915042" target="\_blank">11915042</a>, PubMed:<a href="http://www.uniprot.org/citations/28167758" target="\_blank">28167758</a>, PubMed:<a href="http://www.uniprot.org/citations/29021580" target="\_blank">29021580</a>). The RXRA/RARB heterodimer can act as a transcriptional repressor or transcriptional activator, depending on the RARE DNA element context (PubMed:<a href="http://www.uniprot.org/citations/29021580" target="\_blank">29021580</a>). The RXRA/PPARA heterodimer is required for PPARA transcriptional activity on fatty acid oxidation genes such as ACOX1 and the P450 system genes (PubMed:<a href="http://www.uniprot.org/citations/10195690" target="\_blank">10195690</a>). Together with RARA, positively regulates microRNA- 10a expression, thereby inhibiting the GATA6/VCAM1 signaling response to pulsatile shear stress in vascular endothelial cells (PubMed:<a href="http://www.uniprot.org/citations/28167758" target="\_blank">28167758</a>). Acts as an enhancer of RARA binding to RARE DNA element (PubMed:<a href="http://www.uniprot.org/citations/28167758" target="\_blank">28167758</a>). May facilitate the nuclear import of heterodimerization partners such as VDR and NR4A1 (PubMed:<a href="http://www.uniprot.org/citations/12145331" target="\_blank">12145331</a>, PubMed:<a href="http://www.uniprot.org/citations/15509776" target="\_blank">15509776</a>). Promotes myelin debris phagocytosis and remyelination by macrophages (PubMed:<a href="http://www.uniprot.org/citations/26463675" target="\_blank">26463675</a>). Plays a role in the attenuation of the innate immune system in response to viral infections, possibly by negatively regulating the transcription of antiviral genes such as type I IFN genes (PubMed:<a href="http://www.uniprot.org/citations/25417649" target="\_blank">25417649</a>). Involved in the regulation of calcium signaling by repressing ITPR2 gene expression, thereby controlling cellular senescence (PubMed:<a href="http://www.uniprot.org/citations/30216632" target="\_blank">30216632</a>).

### Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:11915042, ECO:0000269|PubMed:12145331, ECO:0000269|PubMed:15509776, ECO:0000269|PubMed:17761950, ECO:0000269|PubMed:28167758}. Cytoplasm. Mitochondrion.

Note=Localization to the nucleus is enhanced by vitamin D3 (PubMed:15509776). Nuclear localization may be enhanced by the interaction with heterodimerization partner VDR (PubMed:12145331). Translocation to the mitochondrion upon interaction with NR4A1 (PubMed:15509776, PubMed:17761950). Increased nuclear localization upon pulsatile shear stress (PubMed:28167758)

#### Tissue Location

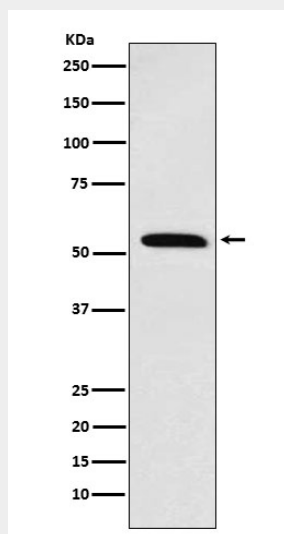
Expressed in lung fibroblasts (at protein level) (PubMed:30216632). Expressed in monocytes (PubMed:26463675). Highly expressed in liver, also found in kidney and brain (PubMed:14702039, PubMed:2159111, PubMed:24275569).

#### Retinoid X Receptor alpha Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Retinoid X Receptor alpha Antibody - Images



Western blot analysis of Retinoid X Receptor alpha expression in K562 cell lysate.