

**Retinoid X Receptor alpha Rabbit mAb**  
Catalog # AP76021**Specification****Retinoid X Receptor alpha Rabbit mAb - Product Information**

Application	WB, IP, ICC
Primary Accession	<a href="#">P19793</a>
Reactivity	Human, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	50811

**Retinoid X Receptor alpha Rabbit mAb - Additional Information**

Gene ID 6256

**Other Names**

RXRA

**Dilution**

WB~~1/500-1/1000

IP~~N/A

ICC~~N/A

**Format**

Liquid

**Retinoid X Receptor alpha Rabbit mAb - Protein Information**

Name RXRA

Synonyms NR2B1

**Function**

Receptor for retinoic acid that acts as a transcription factor (PubMed:[10874028](http://www.uniprot.org/citations/10874028), 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), PubMed:[11915042](http://www.uniprot.org/citations/11915042), PubMed:[16107141](http://www.uniprot.org/citations/16107141), PubMed:[17761950](http://www.uniprot.org/citations/17761950), PubMed:[18800767](http://www.uniprot.org/citations/18800767), PubMed:[19167885](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:10874028, 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 Rabbit mAb - 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 Rabbit mAb - Images



