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# Anti-RXR alpha (pS260) Antibody

Rabbit polyclonal antibody to RXR alpha (pS260) Catalog # AP60933

## **Product Information**

ApplicationWBPrimary AccessionP19793Other AccessionP28700

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW50811

## **Additional Information**

**Gene ID** 6256

Other Names NR2B1; Retinoic acid receptor RXR-alpha; Nuclear receptor subfamily 2 group

B member 1; Retinoid X receptor alpha

**Target/Specificity** Recognizes endogenous levels of RXR alpha (pS260) protein.

**Dilution** WB~~WB (1/500 - 1/1000)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

### **Protein Information**

Name RXRA

Synonyms NR2B1

**Function** Receptor for retinoic acid that acts as a transcription factor

(PubMed: 10874028, PubMed: 11162439, PubMed: 11915042,

PubMed:<u>37478846</u>). 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:<u>10195690</u>, PubMed:<u>11162439</u>, PubMed:<u>11915042</u>, PubMed:<u>16107141</u>, PubMed:<u>17761950</u>, PubMed:<u>18800767</u>, PubMed:<u>19167885</u>, PubMed:<u>28167758</u>,

PubMed:<u>37478846</u>). 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:<u>10195690</u>, PubMed:<u>11162439</u>, PubMed:<u>11915042</u>, PubMed:<u>17761950</u>, PubMed:<u>28167758</u>). The high affinity

ligand for retinoid X receptors (RXRs) is 9-cis retinoic acid (PubMed: 1310260). 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: 20215566). On ligand binding, the corepressors dissociate from the receptors and coactivators are recruited leading to transcriptional activation (PubMed: 20215566, PubMed: 37478846, PubMed:9267036). Serves as a common heterodimeric partner for a number of nuclear receptors, such as RARA, RARB and PPARA (PubMed: 10195690, PubMed: 11915042, PubMed: 28167758, PubMed: 29021580). The RXRA/RARB heterodimer can act as a transcriptional repressor or transcriptional activator, depending on the RARE DNA element context (PubMed:29021580). The RXRA/PPARA heterodimer is required for PPARA transcriptional activity on fatty acid oxidation genes such as ACOX1 and the P450 system genes (PubMed: 10195690). Together with RARA, positively regulates microRNA-10a expression, thereby inhibiting the GATA6/VCAM1 signaling response to pulsatile shear stress in vascular endothelial cells (PubMed:28167758). Acts as an enhancer of RARA binding to RARE DNA element (PubMed: 28167758). May facilitate the nuclear import of heterodimerization partners such as VDR and NR4A1 (PubMed:<u>12145331</u>, PubMed:<u>15509776</u>). Promotes myelin debris phagocytosis and remyelination by macrophages (PubMed: 26463675). 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: <u>25417649</u>). Involved in the regulation of calcium signaling by repressing ITPR2 gene expression, thereby controlling cellular senescence (PubMed:30216632).

#### **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**

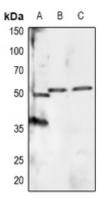
Expressed in lung fibroblasts (at protein level) (PubMed:30216632). Expressed in monocytes (PubMed:26463675). Highly expressed in liver, also found in kidney and brain (PubMed:14702039, PubMed:2159111, PubMed:24275569).

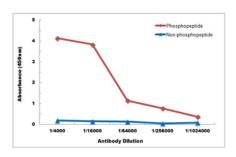
# **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RXR alpha. The exact sequence is proprietary.

# **Images**

Western blot analysis of RXR alpha (pS260) expression in Hela (A), mouse brain (B), rat brain (C) whole cell lysates.





Direct ELISA antibody dose-response curve using Anti-RXR alpha (pS260) Antibody. Antigen (phosphopeptide and non-phosphopeptide) concentration is 5 ug/ml. Goat Anti-Rabbit IgG (H&L) - HRP was used as the secondary antibody, and signal was developed by TMB substrate.

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