

Anti-RXR alpha (pS260) Antibody

Rabbit polyclonal antibody to RXR alpha (pS260)

Catalog # AP60933

Product Information

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|--------------------------|------------------------|
| Application | WB |
| Primary Accession | P19793 |
| Other Accession | P28700 |
| Reactivity | Human, Mouse, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 50811 |

Additional Information

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

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| Name | RXRA |
| Synonyms | NR2B1 |
| Function | Receptor for retinoic acid that acts as a transcription factor (PubMed: 10874028 , PubMed: 11162439 , PubMed: 11915042 , PubMed: 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 , PubMed: 11162439 , PubMed: 11915042 , PubMed: 16107141 , PubMed: 17761950 , PubMed: 18800767 , PubMed: 19167885 , PubMed: 28167758 , PubMed: 37478846). 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: 10195690 , PubMed: 11162439 , |

PubMed:[11915042](#), PubMed:[17761950](#), PubMed:[28167758](#)). 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:[12145331](#), PubMed:[15509776](#)). 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:[25417649](#)). 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

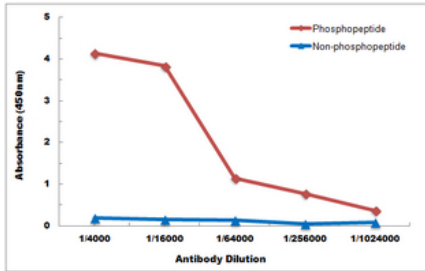
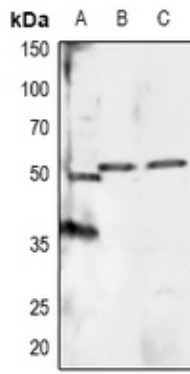
Expressed in lung fibroblasts (at protein level) (PubMed:30216632). Expressed in monocytes (PubMed:26463675). Highly expressed in liver, also found in kidney and brain (PubMed:14702039, PubMed:2159111, PubMed:24275569).

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.