

Rabbit Retinoic Acid Receptor alpha/beta Polyclonal Antibody | anti-RARB antibody

Phospho-Retinoic Acid Receptor alpha/beta (Ser96) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329757	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

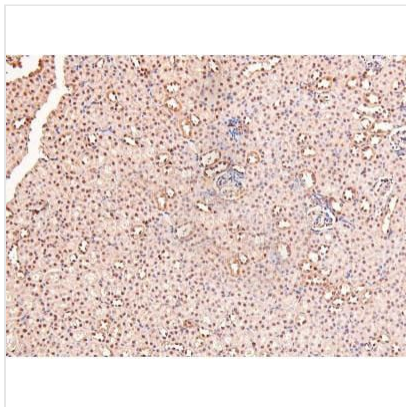
Retinoic Acid Receptor alpha/beta; Polyclonal Antibody; Phospho-Retinoic Acid Receptor alpha/beta (Ser96) Antibody; NR1B1; Nuclear mitotic apparatus protein retinoic acid receptor alpha fusion protein; Nuclear receptor subfamily 1 group B member 1; Nucleophosmin retinoic acid receptor alpha fusion protein NPM RAR long form; RAR alpha; RAR; RAR-alpha; rara; RARA_HUMAN; RARalpha; RARalpha1; Retinoic acid nuclear receptor alpha variant 1; Retinoic acid nuclear receptor alpha variant 2; Retinoic acid receptor alpha; Retinoic acid receptor alpha polypeptide; HAP; HBV-activated protein; NR1B2; Nuclear receptor subfamily 1 group B member 2; RAR B; RAR beta; RAR epsilon; RAR-beta; RAR-epsilon; RARB; RARB_HUMAN; Retinoic acid receptor beta 2; Retinoic acid receptor beta 4; Retinoic acid receptor beta 5; Retinoic acid receptor beta; Retinoic acid receptor beta polypeptide; RRB2; anti-RARB antibody

PRODUCT SPECIFICATIONS

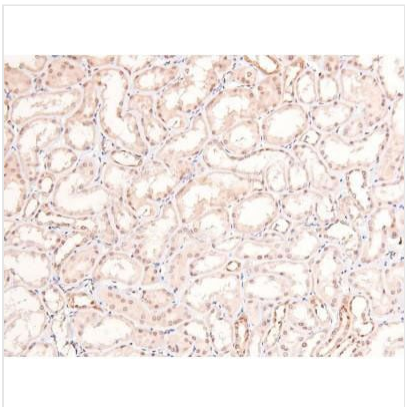
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-Retinoic Acid Receptor alpha/beta (Ser96) Antibody detects endogenous levels of Retinoic Acid Receptor alpha/beta only when phosphorylated at Retinoic AcSer96. Tissue Specificity: Expressed in aortic endothelial cells (at protein level).
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-RARB antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Retinoic Acid Receptor alpha/beta around the phosphorylation site of Ser96.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Phosphorylated on serine and threonine residues. Phosphorylation does not change during cell cycle. Phosphorylation on Ser-77 is crucial for transcriptional activity (By similarity). Phosphorylation by AKT1 is required for the repressor activity but has no effect on DNA binding, protein stability nor subcellular localization. Phosphorylated by PKA in vitro. This phosphorylation on Ser-219 and Ser-369 is critical for ligand binding, nuclear localization and transcriptional activity in response to FSH signaling. Sumoylated with SUMO2, mainly on Lys-399 which is also required for SENP6 binding. On all-trans retinoic acid (ATRA) binding, a conformational change may occur that allows sumoylation on two additional site, Lys-166 and Lys-171. Probably desumoylated by SENP6. Sumoylation levels determine nuclear localization and regulate ATRA-mediated transcriptional activity. Trimethylation enhances heterodimerization with RXRA and positively modulates the transcriptional activation. Ubiquitinated. Acetylated; acetylation is increased upon pulsatile shear stress and decreased upon oscillatory shear stress.

Subunit Structure	Homodimer (By similarity). Heterodimer; with a RXR molecule (By similarity). Binds DNA preferentially as a RAR/RXR heterodimer (By similarity). Heterodimerizes (via NR LBD) with RXRA. Interacts weakly with NCOR2.
Similarity	Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.The DNA-binding nuclear receptor domain and the NR LBD domain are required for binding of the RARB/RXRA heterodimer to both DR1 and DR5 DNA elements.Belongs to the nuclear hormone receptor family. NR1 subfamily.
Subcellular Location	Nucleus. Cytoplasm. Nucleus. Nucleus. Cytoplasm.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

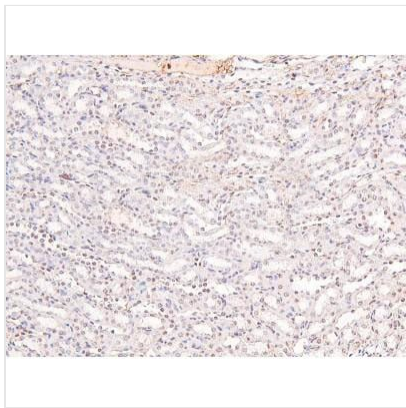
IMAGES



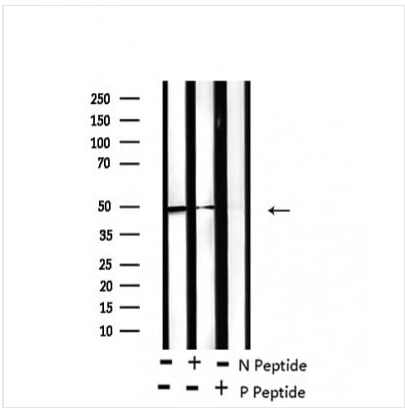
IHC (Immunohistochemistry)
At 1/200 staining Mouse kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
At 1/200 staining Rat kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)
Staining Rat kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of Retinoic Acid Receptor 1 (RAR1) (Phospho-Ser96) using TNF-α treated HeLa whole cell lysates. -/+ means absence or presence of N peptide/non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-RARB antibody	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 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 or presence of hormone ligand, acts mainly as an activator of gene expression due to weak binding to corepressors. The RXRA/RARB heterodimer can act as a repressor on the DR1 element and as an activator on the DR5 element. In concert with RARG, required for skeletal growth, matrix homeostasis and growth plate function (By similarity).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4506419
NCBI GeneID	5914
NCBI Accession #	NP_000955.1
NCBI GenBank Nucleotide #	NM_000964.3
UniProt Accession #	P10276; P10826
Molecular Weight	50,771 Da
NCBI Official Full Name	retinoic acid receptor alpha isoform 1
NCBI Official Synonym Full Names	retinoic acid receptor, alpha
NCBI Official Symbol	RARA
NCBI Official Synonym Symbols	RAR; NR1B1
NCBI Protein Information	retinoic acid receptor alpha; RAR-alpha; retinoic acid receptor, alpha polypeptide; nuclear receptor subfamily 1 group B member 1; retinoic acid nuclear receptor alpha variant 1; retinoic acid nuclear receptor alpha variant 2; nucleophosmin-retinoic acid
UniProt Protein Name	Retinoic acid receptor alpha
UniProt Gene Name	RARA
UniProt Synonym Gene Names	NR1B1; RAR-alpha
UniProt Entry Name	RARA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/retinoic-acid-receptor-alpha-beta-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/329757>