

Rabbit anti-Human RORA Polyclonal Antibody | anti-RORA antibody

RORA Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323867	Rabbit	Human	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

RORA; Polyclonal Antibody; RORA Antibody; fhl2a; NR1F1; Nuclear receptor ROR-alpha; Nuclear receptor RZR-alpha; Nuclear receptor subfamily 1 group F member 1; RAR-related orphan receptor A; Retinoid-related orphan receptor-alpha; Rora; RORA_HUMAN; RZR-ALPHA; RZRA; anti-RORA antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Specificity	RORA antibody detects endogenous levels of total RORA
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	548
Applicable Applications for anti-RORA antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Nucleus.
Tissue Specificity	Widely expressed in a number of tissues. Expressed in both regulatory T-cells (Treg) and effector T-cells (Teff).
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of extracts from HeLa cells using RORA antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA323867 at 1/100 staining Human gastric tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample 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.



IF (Immunofluorescence)

AAA323867 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-RORA antibody	Function: Nuclear receptor that binds DNA as a monomer to ROR response elements (RORE) containing a single core motif half-site 5'-AGGTCA-3' preceded by a short A-T-rich sequence. Key regulator of embryonic development, cellular differentiation, immunity, circadian rhythm as well as lipid, steroid, xenobiotics and glucose metabolism. Considered to have intrinsic transcriptional activity, have some natural ligands like oxysterols that act as agonists (25-hydroxycholesterol) or inverse agonists (7-oxygenated sterols), enhancing or repressing the transcriptional activity, respectively. Recruits distinct combinations of cofactors to target genes regulatory regions to modulate their transcriptional expression, depending on the tissue, time and promoter contexts. Regulates genes involved in photoreceptor development including OPN1SW, OPN1SM and ARR3 and skeletal muscle development with MYOD1. Required for proper cerebellum development, regulates SHH gene expression, among others, to induce granule cells proliferation as well as expression of genes involved in calcium-mediated signal transduction. Regulates the circadian expression of several clock genes, including CLOCK, ARNTL/BMAL1, NPAS2 and CRY1. Competes with NR1D1 for binding to their shared DNA response element on some clock genes such as ARNTL/BMAL1, CRY1 and NR1D1 itself, resulting in NR1D1-mediated repression or RORA-mediated activation of clock genes expression, leading to the circadian pattern of clock genes expression. Therefore influences the period length and stability of the clock. Regulates genes involved in lipid metabolism such as apolipoproteins APOA1, APOA5, APOC3 and PPARG. In liver, has specific and redundant functions with RORC as positive or negative modulator of expression of genes encoding phase I and phase II proteins involved in the metabolism of lipids, steroids and xenobiotics, such as CYP7B1 and SULT2A1. Induces a rhythmic expression of some of these genes. In addition, interplays functionally with NR1H2 and NR1H3 for the regulation of genes involved in cholesterol metabolism. Also involved in the regulation of hepatic glucose metabolism through the modulation of G6PC and PCK1. In adipose tissue, plays a role as negative regulator of adipocyte differentiation, probably acting through dual mechanisms. May suppress CEBPB-dependent adipogenesis through direct interaction and PPARG-dependent adipogenesis through competition for DNA-binding. Downstream of IL6 and TGFB and synergistically with RORC isoform 2, is implicated in the lineage specification of uncommitted CD4+ T-helper (T(H)) cells into T(H)17 cells, antagonizing the T(H)1 program. Probably regulates IL17 and IL17F expression on T(H) by binding to the essential enhancer conserved non-coding sequence 2 (CNS2) in the IL17-IL17F locus. Involved in hypoxia signaling by interacting with and activating the transcriptional activity of HIF1A. May inhibit cell growth in response to cellular stress. May exert an anti-inflammatory role by inducing CHUK expression and inhibiting NF-kappa-B signaling. Subunit Structure: Monomer. Interacts (via the DNA-binding domain) with HIF1A; the interaction enhances HIF1A transcription under hypoxia through increasing protein stability. Interacts with CEBPB; the interaction disrupts the interaction CEBPB:EP300. Interacts with the coactivators NCOA2, PPARGC1A (via LXXLL motif), EP300 and MED1. Interacts with the corepressor NCOR1. Interacts with MAGED1 and CTNNB1. Interacts with CRY1 and PER2. Interacts (via AF-2 motif) with PROX1 (By similarity). Interacts with NRIP1. Isoform 4 interacts (via AF-2 motif) with isoform 1 of FOXP3 (via LXXLL motif). Post-translational Modifications: Phosphorylation by conventional PKCs in neurons inhibits transcriptional activity. Phosphorylated on Thr-183 by MAPK1/ERK1 in vitro. Sumoylated by SENP1 and SENP2. Sumoylation, promoted by PIAS2, PIAS3, PIAS4 but not PIAS1, enhances the transcriptional activity. Desumoylated by SENP1. Ubiquitinated, leading to its degradation by the proteasome. Proteasomal degradation is required for efficient transcriptional activity and is prevented by HR. Isoform 1: monomethylated at Lys-38 by EZH2, this creates a degron recognized by a DCX (DDB1-DCAF1/VPBP-CUL4A-RBX1) E3 ubiquitin ligase complex. Similarity: The AF-2 (activation function-2) motif is required for recruiting coregulators containing LXXLL motifs. Belongs to the nuclear hormone receptor family. NR1 subfamily.
---	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506577
NCBI GeneID	6095

NCBI Accession #	NP_002934.1
NCBI GenBank Nucleotide #	NM_002943.3
UniProt Accession #	P35398 ; P35397 ; P35399 ; P45445 ; Q495X4 ; Q96H83
Molecular Weight	Observed: 60 kD Predicted: 59 kDa
NCBI Official Full Name	nuclear receptor ROR-alpha isoform c
NCBI Official Synonym Full Names	RAR related orphan receptor A
NCBI Official Symbol	RORA
NCBI Official Synonym Symbols	ROR1; ROR2; ROR3; RZRA; NR1F1; IDDECA; RZR-ALPHA
NCBI Protein Information	nuclear receptor ROR-alpha
UniProt Protein Name	Nuclear receptor ROR-alpha
UniProt Gene Name	RORA
UniProt Synonym Gene Names	NR1F1; RZRA

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/rora-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/323867>