

Datasheet for ABIN7161873 anti-RORA antibody (AA 110-214)

1 Image



Overview

Quantity:	100 μg
Target:	RORA
Binding Specificity:	AA 110-214
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RORA antibody is un-conjugated
Application:	Western Blotting (WB), ELISA
Product Details	
Immunogen:	Recombinant Human Nuclear receptor ROR-alpha protein (110-214AA)
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	>95%, Protein G purified
Target Details	
Target:	RORA
Alternative Name:	RORA (RORA Products)
Background:	Background: 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 CEBPBdependent 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 NFkappa-B signaling.

Aliases: fhl2a antibody, NR1F1 antibody, Nuclear receptor ROR alpha antibody, Nuclear receptor ROR-alpha antibody, Nuclear receptor RZR-alpha antibody, Nuclear receptor subfamily 1 group F member 1 antibody, RAR related orphan receptor A antibody, RAR related orphan receptor

UniProt:

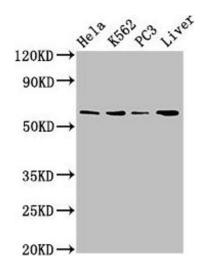
Pathways:

	alpha antibody, RAR-related orphan receptor A antibody, Retinoid-related orphan receptor-alpha
	antibody, Rora antibody, RORA_HUMAN antibody, RZR alpha antibody, RZR-ALPHA antibody,
	RZRA antibody, Transcription factor RZR alpha antibody
	P35398
S:	Nuclear Receptor Transcription Pathway, Steroid Hormone Mediated Signaling Pathway,
	Regulation of Lipid Metabolism by PPARalpha

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000,
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300
	Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be
	handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Western Blotting

Image 1. Western Blot Positive WB detected in: Hela whole cell lysate, K562 whole cell lysate, PC-3 whole cell lysate, Mouse liver tissue All lanes: RORA antibody at $2.7~\mu g/mL$ Secondary Goat polyclonal to rabbit lgG at 1/50000 dilution Predicted band size: 59, 64, 62, 54 kDa Observed band size: 59~kDa