

ARG63733 anti-Retinoic Acid Receptor alpha antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes Retinoic Acid Receptor alpha
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat, Cow, Dog
Tested Application	WB
Specificity	NP_000955.1 (isfa) and NP_001138773.1(alpha) represent identical proteins. This antibody is expected to recognize all three reported isoforms (NP_000955.1; NP_001019980.1; NP_001138774.1). Please note the epitope is from the mouse/rat sequence. Human sequence is SPSLSPSSNRSSPATHSP and thus highly similar.
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	Retinoic Acid Receptor alpha
Species	Human
Immunogen	C-SPSLSPSSHRSSPATQSP
Conjugation	Un-conjugated
Alternate Names	Nuclear receptor subfamily 1 group B member 1; RAR; RAR-alpha; Retinoic acid receptor alpha; NR1B1

Application Instructions

Application table	Application	Dilution
	WB	0.5 - 2 µg/ml

Application Note WB: Recommend incubate at RT for 1h.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 5914 Human](#)

[Swiss-port # P10276 Human](#)

Background

This gene represents a nuclear retinoic acid receptor. The encoded protein, retinoic acid receptor alpha, regulates transcription in a ligand-dependent manner. This gene has been implicated in regulation of development, differentiation, apoptosis, granulopoiesis, and transcription of clock genes. Translocations between this locus and several other loci have been associated with acute promyelocytic leukemia. Alternatively spliced transcript variants have been found for this locus.[provided by RefSeq, Sep 2010]

Research Area

Cancer antibody; Gene Regulation antibody; Metabolism antibody; Signaling Transduction antibody

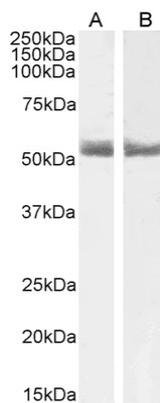
Calculated Mw

51 kDa

PTM

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.

Images



ARG63733 anti-Retinoic Acid Receptor alpha antibody WB image

Western blot: 35 µg of Human breast (A) and Human breast cancer (B) lysates (in RIPA buffer) stained with ARG63733 anti-Retinoic Acid Receptor alpha antibody at 1 µg/ml dilution and incubated at RT for 1 hour.