

Product datasheet

Anti-ROR gamma antibody ab113434

★★★★★ [1 Abreviews](#) [4 References](#) [3 Images](#)

Overview

Product name	Anti-ROR gamma antibody
Description	Goat polyclonal to ROR gamma
Host species	Goat
Specificity	ab113434 is expected to recognize both reported isoforms (NP_005051.2; NP_001001523.1).
Tested applications	Suitable for: ICC/IF, WB, Flow Cyt
Species reactivity	Reacts with: Human

Predicted to work with: Mouse, Rat, Horse, Cow, Dog 

Immunogen

Synthetic peptide:

CHLEYSPIRGKAE

, corresponding to internal sequence amino acids 200-212 of Human ROR gamma (isoform a) and amino acids 179-191 (isoform b) (NP_005051.2; NP_001001523.1).

 [Run BLAST with](#)

 [Run BLAST with](#)

Positive control

WB: Human colon, liver and testes lysate; ICC/IF: U2OS cells; Flow Cyt: HeLa cells.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 99% Tris buffered saline, 0.5% BSA
Purity	Immunogen affinity purified
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity

chromatography using the immunizing peptide.

Clonality

Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab113434 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use 10µg for 10 cells.
WB	★★★★★ (1)	Use a concentration of 0.01 - 0.1 µg/ml. Detects a band of approximately 55 kDa (predicted molecular weight: 58 kDa). 1 hour primary incubation at room temperature is recommended for this product.
Flow Cyt		Use a concentration of 10 µg/ml.

Target

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 cellular differentiation, immunity, peripheral circadian rhythm as well as lipid, steroid, xenobiotics and glucose metabolism (PubMed:19381306, PubMed:19965867, PubMed:22789990, PubMed:26160376, PubMed:20203100). 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 (PubMed:19965867, PubMed:22789990). Recruits distinct combinations of cofactors to target gene regulatory regions to modulate their transcriptional expression, depending on the tissue, time and promoter contexts. Regulates the circadian expression of clock genes such as CRY1, ARNTL/BMAL1 and NR1D1 in peripheral tissues and in a tissue-selective manner. 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 RORC-mediated activation of the expression, leading to the circadian pattern of clock genes expression. Therefore influences the period length and stability of the clock. Involved in the regulation of the rhythmic expression of genes involved in glucose and lipid metabolism, including PLIN2 and AVPR1A (PubMed:19965867). Negative regulator of adipocyte differentiation through the regulation of early phase genes expression, such as MMP3. Controls adipogenesis as well as adipocyte size and modulates insulin sensitivity in obesity. In liver, has specific and redundant functions with RORA 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 SULT1E1. Also plays also a role in the regulation of hepatocyte glucose metabolism through the regulation of G6PC and PCK1 (PubMed:19965867). Regulates the rhythmic expression of PROX1 and promotes its nuclear localization (PubMed:19381306, PubMed:19965867, PubMed:22789990, PubMed:26160376, PubMed:20203100). Plays an indispensable role in the induction of IFN-gamma dependent anti-mycobacterial systemic immunity (PubMed:26160376). Isoform 2: Essential for thymopoiesis and the development of several secondary lymphoid

tissues, including lymph nodes and Peyer's patches. Required for the generation of LT α (lymphoid tissue inducer) cells. Regulates thymocyte survival through DNA-binding on ROREs of target gene promoter regions and recruitment of coactivators via the AF-2. Also plays a key role, downstream of IL6 and TGF β and synergistically with RORA, for 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. May also play a role in the pre-TCR activation cascade leading to the maturation of alpha/beta T-cells and may participate in the regulation of DNA accessibility in the TCR-J(alpha) locus.

Tissue specificity

Isoform 1 is widely expressed in many tissues, including liver and adipose, and highly expressed in skeletal muscle. Isoform 2 is primarily expressed in immature thymocytes.

Involvement in disease

Immunodeficiency 42

Sequence similarities

Belongs to the nuclear hormone receptor family. NR1 subfamily.

Contains 1 nuclear receptor DNA-binding domain.

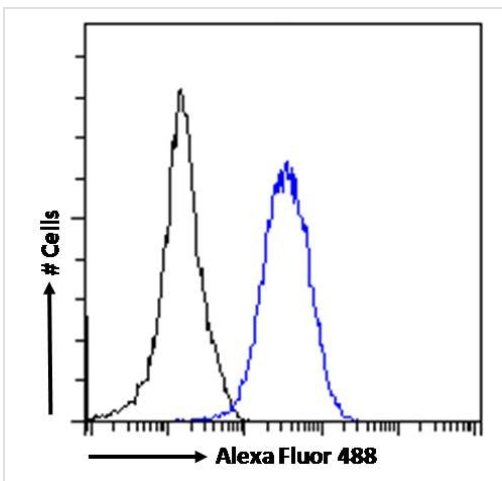
Domain

The AF-2 (activation function-2) motif is required for recruiting coregulators containing LXXLL motifs such as NCOA1 and NCOA2.

Cellular localization

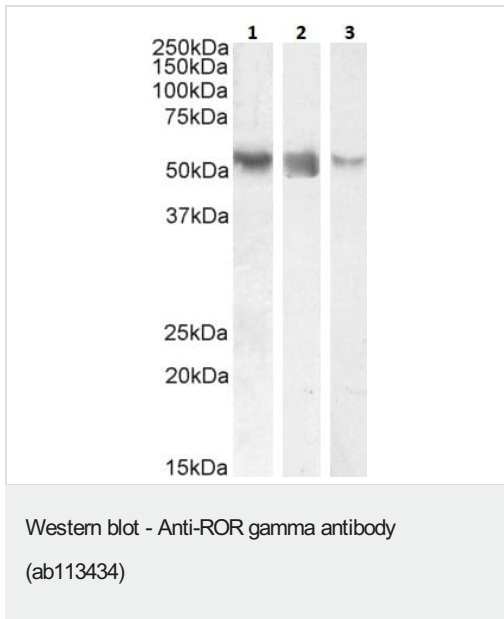
Nucleus.

Images



Flow cytometric analysis of paraformaldehyde fixed HeLa cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10 μ g/mL) followed by Alexa Fluor 488 secondary antibody (1 μ g/mL). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.

Flow Cytometry - Anti-ROR gamma antibody (ab113434)



All lanes : Anti-ROR gamma antibody (ab113434) at 0.1 µg/ml

Lane 1 : Human colon lysate (35µg protein in RIPA buffer)

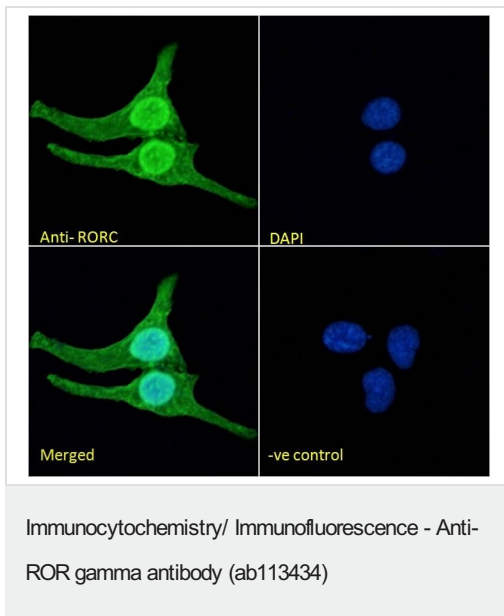
Lane 2 : Human liver lysate (35µg protein in RIPA buffer)

Lane 3 : Human testes lysate (35µg protein in RIPA buffer)

Predicted band size: 58 kDa

Observed band size: 55-60 kDa

Detected by chemiluminescence.



Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor® 488 secondary antibody (2ug/ml), showing nuclear, cytoplasmic and plasma membrane staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor® 488 secondary antibody (2ug/ml).

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