

RORC (aa200-212) Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF3475a

Specification

RORC (aa200-212) Antibody (internal region) - Product Information

Application	WB, IF, FC
Primary Accession	P51449
Other Accession	NP_005051.2 , NP_001001523.1 , 6097 , 19885 (mouse)
Reactivity	Human
Predicted	Mouse, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	58195

RORC (aa200-212) Antibody (internal region) - Additional Information

Gene ID 6097

Other Names

Nuclear receptor ROR-gamma, Nuclear receptor RZR-gamma, Nuclear receptor subfamily 1 group F member 3, RAR-related orphan receptor C, Retinoid-related orphan receptor-gamma, RORC, NR1F3, RORG, RZRG

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RORC (aa200-212) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

RORC (aa200-212) Antibody (internal region) - Protein Information

Name RORC

Synonyms NR1F3, RORG, RZRG

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, 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 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 a role in the regulation of hepatocyte glucose metabolism through the regulation of G6PC1 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).

Cellular Location

Nucleus.

Tissue Location

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

RORC (aa200-212) Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

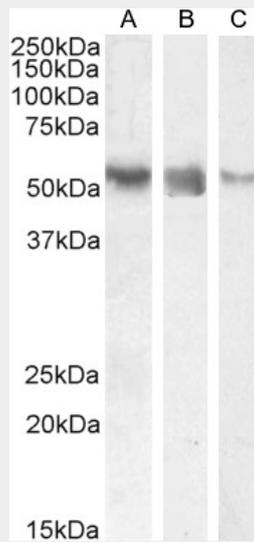
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

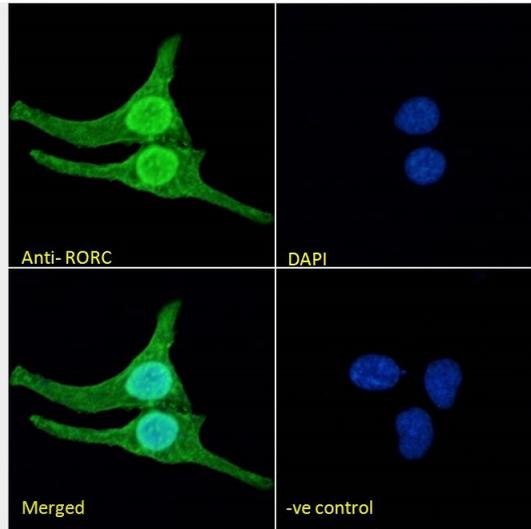
RORC (aa200-212) Antibody (internal region) - Images



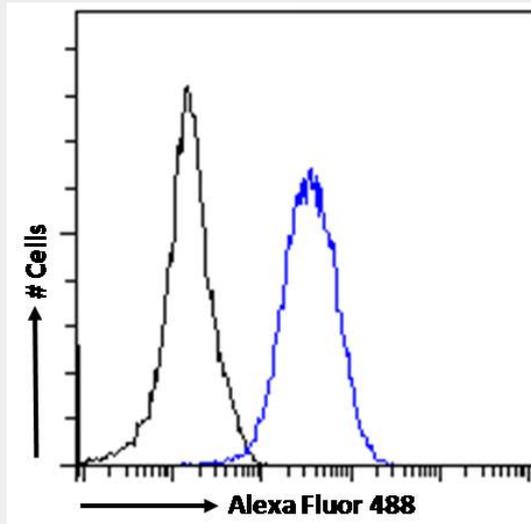
AF3475a (0.1 $\mu\text{g/ml}$) staining of Human Colon lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



EB10749 (0.1 $\mu\text{g/ml}$) staining of Human Colon (A), (0.03 $\mu\text{g/ml}$) Liver (B) and (0.01 $\mu\text{g/ml}$) Testes (C) lysate (35 μg protein in RIPA buffer). Detected by chemiluminescence.



EB10749 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.



EB10749 Flow cytometric analysis of paraformaldehyde fixed HeLa cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol

RORC (aa200-212) Antibody (internal region) - Background

This antibody is expected to recognize both reported isoforms (NP_005051.2; NP_001001523.1).

RORC (aa200-212) Antibody (internal region) - References

ROR gamma t is dispensable for the development of intestinal mucosal T cells. Naito T, Shiohara T, Hibi T, Suematsu M, Ishikawa H, Mucosal immunology 2008 May 1 (3): 198-207. PMID: 19079179