

RORC Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13786c**Specification**

RORC Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P51449
Other Accession	NP_001001523.1 , NP_005051.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	58195
Antigen Region	187-216

RORC Antibody (Center) - 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

Target/Specificity

This RORC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 187-216 amino acids from the Central region of human RORC.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

RORC Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

RORC Antibody (Center) - 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:[20203100](#), PubMed:[22789990](#), PubMed:[26160376](#)). 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:[20203100](#), PubMed:[22789990](#), PubMed:[26160376](#)). Plays an indispensable role in the induction of IFN-gamma dependent anti-mycobacterial systemic immunity (PubMed:[26160376](#)).

Cellular Location

Nucleus.

Tissue Location

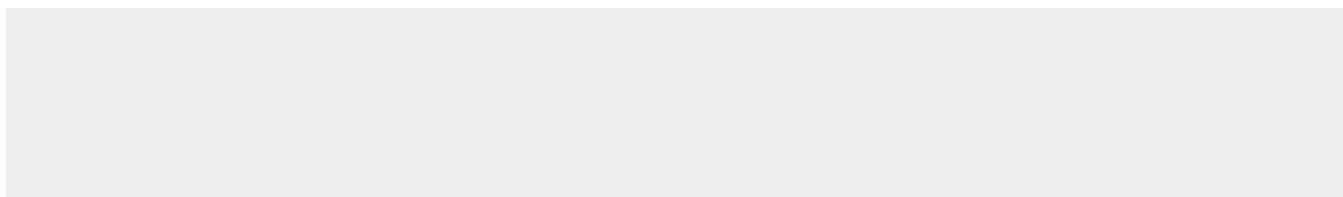
Isoform 1 is widely expressed in many tissues, including liver and adipose, and highly expressed in skeletal muscle Isoform 2 is primarily expressed in immature thymocytes

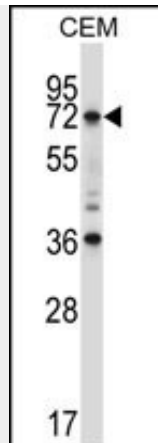
RORC Antibody (Center) - Protocols

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 Antibody (Center) - Images





RORC Antibody (Center) (Cat. #AP13786c) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the RORC antibody detected the RORC protein (arrow).

RORC Antibody (Center) - Background

The protein encoded by this gene is a DNA-binding transcription factor and is a member of the NR1 subfamily of nuclear hormone receptors. The specific functions of this protein are not known; however, studies of a similar gene in mice have shown that this gene may be essential for lymphoid organogenesis and may play an important regulatory role in thymopoiesis. In addition, studies in mice suggest that the protein encoded by this gene may inhibit the expression of Fas ligand and IL2. Two transcript variants encoding different isoforms have been found for this gene.

RORC Antibody (Center) - References

Wang, Y., et al. *Biochim. Biophys. Acta* 1801(8):917-923(2010)
Rose, J.E., et al. *Mol. Med.* 16 (7-8), 247-253 (2010) :
Burgler, S., et al. *J. Immunol.* 184(11):6161-6169(2010)
Jin, L., et al. *Mol. Endocrinol.* 24(5):923-929(2010)
Wang, W.J., et al. *J. Reprod. Immunol.* 84(2):164-170(2010)