

Product datasheet for **TP522309**

Rorc (NM_011281) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse RAR-related orphan receptor gamma (Rorc), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR222309 representing NM_011281 Red =Cloning site Green =Tags(s) MDRAPQRHHRTSRELLAAKKTHTSQIEVIPCKICGDKSSGIHYGVITCEGCKGFFRRSQQCNVAYSCTRQ QNCPIDRTSRNRCQHCRLLKCLALGMSRDAVKFGRMSKKQRDSLHAEVQKQLQQQQEQVAKTPPAGSR GADTLTYTLGLSDGQLPLGASPDLPASACPPGLLRASGSGPPYSNTLAKTEVQGASCHLEYSPEKAE GRDSIYSTDGQLTLGRCGLRFEETRHPHELGEPEQGPDSHCIPSFCSAPEVPYASLTDIEYLVQNVCKSFR ETCQLRLEDLLRQRTNLFSSREEVTSYQRKSMWEMWERCAHHLTEAIQYVVEFAKRLSGFMELCQNDQIIL LKAGAMEVVLVVMCRAYNANNHTVFFEGKYGGVELFRALGCSELISSIFDFSHFLSALCFSEDEIALYTA LVLINANRPLQEKRRVEHLQYNLELAFHHHLCKTHRQGLLAKLPPKGLRSLCSQHVEKLQIFQHLHPI VQAAFPPLYKELFSTDVESPEGLSK SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-MYC/DDK
Predicted MW:	58.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_035411</u>



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Locus ID: 19885

UniProt ID: [P51450](#), [A0A0R4J096](#)

RefSeq Size: 2503

Cytogenetics: 3 F2.1

RefSeq ORF: 1548

Synonyms: Nr1f3; RORgamma; Thor; TOR

Summary: 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. 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 gene regulatory regions to modulate their transcriptional expression, depending on the tissue, time and promoter contexts (PubMed:17666523, PubMed:19381306, PubMed:19965867, PubMed:21853531, PubMed:22789990, PubMed:23723244). Regulates the circadian expression of clock genes such as CRY1, ARNTL/BMAL1 and NR1D1 in peripheral tissues and in a tissue-selective manner (PubMed:22753030). 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 (PubMed:22753030). Involved in the regulation of the rhythmic expression of genes involved in glucose and lipid metabolism, including PLIN2 and AVPR1A. 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 (PubMed:21853531). Also plays also a role in the regulation of hepatocyte glucose metabolism through the regulation of G6PC and PCK1. Regulates the rhythmic expression of PROX1 and promotes its nuclear localization.[UniProtKB/Swiss-Prot Function]