

Product datasheet for **RC216702**

Constitutive androstane receptor (NR1I3) (NM_001077471) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Constitutive androstane receptor (NR1I3) (NM_001077471) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Constitutive androstane receptor
Synonyms:	CAR; CAR1; MB67
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216702 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCAGTAGGGAAGATGAGCTGAGGAAGTGTGTGGTATGTGGGGACCAAGCCACAGGCTACCACTTTA
ATGCGCTGACTTGTGAGGGCTGCAAGGGTTTCTTCAGGAGAAGAGTCAGCAAAAGCATTGGTCCCACCTG
CCCCTTTGCTGGAAGCTGTGAAGTCAGCAAGACTCAGAGGCGCCACTGCCAGCCTGCAGGTTGCAGAAG
TGCTTAGATGCTGGCATGAGGAAAGACATGATACTGTGGCAGAAGCCCTGGCATTGCGGCGAGCAAAGC
AGGCCCAGCGGCGGGCACAGCAACACCTGTGCAACTGAGTAAGGAGCAAGAAGAGCTGATCCGGACACT
CCTGGGGGCCACACCCGCCACATGGGCACCATGTTTGAACAGTTTGTGCAGTTTAGGCCTCCAGCTCAT
CTGTTTCATCCATCACCAGCCCTTGCCACCCCTGGCCCTGTGCTGCCTCTGGTCACACACTTCGCAGACA
TCAACACTTTTCATGGTACTGCAAGTCATCAAGTTTACTAAGGACCTGCCTGTCTCCGTTCCCTGCCCAT
TGAAGACCAGATCTCCCTTCTCAAGGGAGCAGCTGTGGAATCTGTCACATCGTACTCAATACCACTTTC
TGTCTCCAAACACAAACTTCTCTGCGGGCCTCTTCGCTACACAATTGAAGATGGAGCCCGTGACCGAC
CTGGAGTTACCCAGAGAGATGAGATTGATCAGCTGCAAGAGGAGATGGCACTGACTCTGCAAAGCTACAT
CAAGGGCCAGCAGCGAAGGCCCGGGATCGGTTTCTGTATGCGAAGTTGCTAGGCCTGCTGGCTGAGCTC
CGGAGCATTATGAGGCCTACGGGTACCAATCCAGCACATCCAGGGCCTGTCTGCCATGATGCCGCTGC
TCCAGGAGATCTGCAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC216702 protein sequence
 Red=Cloning site Green=Tags(s)

MASREDELRCNVCGDQATGYHFNAL TCEGCKGFFRRTVSKSIGPTCPFAGSCEVSKTQRRHCPACRLQK
 CLDAGMRKDMILSAEALALRRAKQAQRAAQTPVQLSKEQEEL IRTLLGAHTRHMGTMFEQFVQFRPPAH
 LFIHHQPLPTLAPVLPVTHFADINTFMVLQVIKFTKDLPVFVRSPLIEDQISLLKGAAVEICHIVLNTTF
 CLQTQNF LCGPLRYTIEDGARDRPGVTQRDEIDQLQEEMAL TLQSYIKGQQRPRDRFLYAKLLGLLAEL
 RSINEAYGYQIQHIQGLSAMPLLQEICS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6441_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001077471

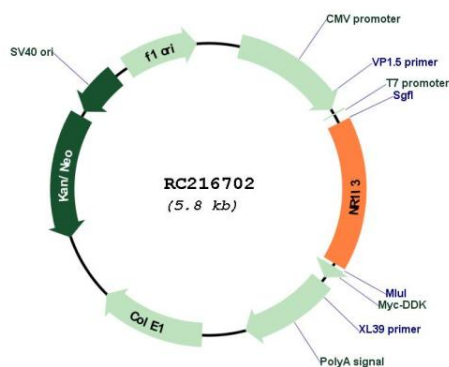
ORF Size: 927 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

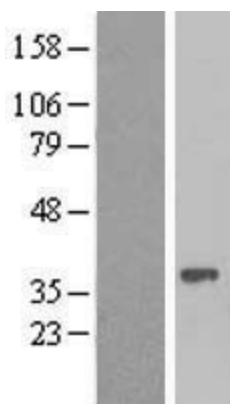
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001077471.3
RefSeq Size:	1270 bp
RefSeq ORF:	930 bp
Locus ID:	9970
UniProt ID:	Q14994
Cytogenetics:	1q23.3
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
MW:	35 kDa
Gene Summary:	<p>This gene encodes a member of the nuclear receptor superfamily, and is a key regulator of xenobiotic and endobiotic metabolism. The protein binds to DNA as a monomer or a heterodimer with the retinoid X receptor and regulates the transcription of target genes involved in drug metabolism and bilirubin clearance, such as cytochrome P450 family members. Unlike most nuclear receptors, this transcriptional regulator is constitutively active in the absence of ligand but is regulated by both agonists and inverse agonists. Ligand binding results in translocation of this protein to the nucleus, where it activates or represses target gene transcription. These ligands include bilirubin, a variety of foreign compounds, steroid hormones, and prescription drugs. In addition to drug metabolism, the CAR protein is also reported to regulate genes involved in glucose metabolism, lipid metabolism, cell proliferation, and circadian clock regulation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2020]</p>

Product images:



Circular map for RC216702



Western blot validation of overexpression lysate (Cat# [LY421426]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216702 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).