

Product datasheet for **SC315540**

Constitutive androstane receptor (NR1I3) (NM_001077482) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Constitutive androstane receptor (NR1I3) (NM_001077482) Human Untagged Clone
Tag:	Tag Free
Symbol:	Constitutive androstane receptor
Synonyms:	CAR; CAR1; MB67
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001077482 edited
 ATGGCCAGTAGGGAAGATGAGCTGAGGAAGTGTGTGGTATGTGGGGACCAAGCCACAGGC
 TACCACCTTAATGCGCTGACTTGTGAGGGCTGCAAGGGTTTCTTCAGGAGAACAGTCAGC
 AAAAGCATTGGTCCACCTGCCCTTTGCTGGAAGCTGTGAAGTCAGCAAGACTCAGAGG
 CGCCACTGCCACGCTGCAGTTGCAGAAGTGCTTAGATGCTGGCATGAGGAAAAGACATG
 ATACTGTCGGCAGAAGCCCTGGCATTGCGGCGAGCAAAGCAGGCCAGCGGCGGGCACAG
 CAAACACCTGTGCAACTGAGTAAGGAGCAAGAAGAGCTGATCCGGACACTCCTGGGGCC
 CACACCCGCCACATGGGCACCATGTTTGAACAGTTTGTGCAGTTTAGGCCTCCAGCTCAT
 CTGTTCCATCCATCACCAGCCCTTGCCACCTGGCCCTGTGCTGCCTCTGGTCACACAC
 TTCGCAGACATCAACACTTTCATGGTACTGCAAGTCATCAAGTTTACTAAGGACCTGCC
 GTCTTCCGTTCCCTGCCATTGAAGACCAGATCTCCCTTCTCAAGGGAGCAGCTGTGAA
 ATCTGTACATCGTACTCAATACCACTTCTGTCTCCAAACACAAAACCTCCTCTGCGGG
 CCTCTTCGCTACACAATTGAAGATGGAGCCCGTGTATCTCCACAGTGGGGTTCCAGGTA
 GAGTTTTTGGAGTTGCTCTTTCACCTTCCATGGAACACTACGAAAACCTGCAGCTCCAAGAG
 CCTGAGTATGTGCTCTTGGCTGCCATGGCCCTCTCTCTCCTGCTCCCTATCTTACAGAC
 CGACCTGGAGTTACCCAGAGAGATGAGATTGATCAGCTGCAAGAGGAGATGGCACTGACT
 CTGCAAAGCTACATCAAGGGCCAGCAGCGAAGGCCCGGGATCGGTTTCTGTATGCGAAG
 TTGCTAGGCCTGCTGGCTGAGCTCCGGAGCATTAAAGAGGCTACGGGTACCAAATCCAG
 CACATCCAGGGCCTGTCTGCCATGATGCCGCTGCTCCAGGAGATCTGCAGCTGA



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_001077482 unedited</p> <pre>GTACGATTTGTATACGACTCCTATAGGGCGGCCGGAATTCTCATGGCCAGTAGGGAAGA TGAGCTGAGGAACTGTGTGGTATGTGGGGACCAAGCCACAGGCTACCACTTTAATGCGCT GACTTGTGAGGGCTGCAAGGGTTTCTTCAGGAGAACAGTCAGCAAAGCATTGGTCCCAC CTGCCCTTTGCTGGAAGCTGTGAAGTCAGCAAGACTCAGAGGCGCCACTGCCAGCCTG CAGGTTGCAGAAGTGCTTAGATGCTGGCATGAGGAAAGACATGATACTGTGCGCAGAAGC CCTGGCATTGCGGCGAGCAAAGCAGGCCAGCGGCGGGCACAGCAAACACCTGTGCAACT GAGTAAGGAGCAAGAAGAGCTGATCCGGACACTCCTGGGGGCCACACCCGCCACATGGG CACCATGTTTGAACAGTTTGTGCAGTTTAGGCCTCCAGCTCATCTGTTTATCCATCACCA GCCCTTGCCACCTGGCCCTGTGCTGCCTCTGGTCACACACTTCGAGACATCAACAC TTTCATGGTACTGCAAGTCATCAAGTTTACTAAGGACCTGCCCGTCTCCGTTCCCTGCC CATTGAAGACCAGATCTCCCTTCTCAAGGGAGCAGCTGTGAAATCTGTCACATCGTACT CAATACCCTTTCTGTCTCCAAACAAAACTTCTCTGCGGGCCTCTTCGCTACACAAT TGAAGATGGAGCCGTGTATCTCCACAGTGGGGTTCCAGGTAGAGTTTTTGGGAGTTGC TCTTTCATTTCCATGGAACACTACGAAAACGCAGCTCAAGAGCCTGAGTATGTGCTC TTGGCTGCCATGGCCCTTCTCTCCTGCTCCCTATCTTACAGACCGACCTGGAGTTACC CAGAGAGATGGAGATTGATCAGCTGCA</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_001077482 unedited</p> <pre>TGGACGCTGCACTTCAGGGCCGGAGAGGCACCTGGGGAGGGGTACAGGGATGCCACCCG GGATCTGTTTCAAGAAACAGCTATGACCGCGCCGCAATCTAGATCAGCTGCAGATCTCCT GGAGCAGCGGCATCATGGCAGACAGGCCCTGGATGTGCTGGATTTGGTACCCGTAGGCCT CATTAAATGCTCCGAGCTCAGCCAGCAGGCCTAGCAACTTCGCATACAGAAACCGATCCC GGGGCCTTCGCTGCTGGCCCTTGTATGAGCTTTGCAGAGTCAGTGCCATCTCCTCTTGCA GCTGATCAATCTCATCTCTCTGGTAACCTCCAGGTCGGTCTGTAAGATAGGGAGCAGGAG AGAAGAGGGCCATGGCAGCCAAGAGCACATACTCAGGCTCTTGGAGCTGCAGTTTTCGTA GTGTTCCATGGAAGTAAAGAGCAACTCCAAAACTCTACCTGGAACCCCACTGTGGGAG ATACACGGGCTCCATCTTCAATTGTGTAGCGAAGAGGCCCGCAGAGGAAGTTTTGTGTTT GGAGACAGAAAGTGGTATTGAGTACGATGTGACAGATTTCCACAGCTGCTCCCTTGAGAA GGGAGATCTGGTCTTCAATGGGCAGGGAACGGAAGACGGGCGAGTCTTAGTAAACTTGA TGACTTGCAGTACCATGAAAGTGTGATGTCTGCGAAGTGTGTGACCAGAGGCACACAG GGGCCAGGGTGGCAAAGGGCTGGTGTGATGATGAACAGATGAGCTGGAGCCTAAACTGCA CAAACCTGTTCAAACATGGTGCCCATGTGCGGGGTGTGGGCCCCAGGAGTGTCCGGATCA GCTCTTCTGCTCCTTACTCAGTTGCACAGGTGTTTGTGTCGCCCGCTGGGCCCTGC TTTGCTCGC</pre>
Restriction Sites:	Please inquire
ACCN:	NM_001077482
Insert Size:	1100 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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:

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.

RefSeq: [NM_001077482.1](#), [NP_001070950.1](#)

RefSeq Size: 1408 bp

RefSeq ORF: 1074 bp

Locus ID: 9970

UniProt ID: [Q14994](#)

Cytogenetics: 1q23.3

Protein Families: Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

Gene Summary: 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]
Transcript Variant: This variant (1), also known as SV-25 or CAR2, represents the longest transcript and encodes the longest isoform (1).