

Product datasheet for **SC301583**

Androgen Receptor (AR) (NM_001011645) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Androgen Receptor (AR) (NM_001011645) Human Untagged Clone
Tag:	Tag Free
Symbol:	Androgen Receptor
Synonyms:	AIS; AR8; DHTR; HUMARA; HYSPI; KD; NR3C4; SBMA; SMAX1; TFM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001011645, the custom clone sequence may differ by one or more nucleotides

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ATGATACTCTGGCTTCACAGTTTGGAGACTGCCAGGGACCATGTTTTGCCATTGACTATTACTTTCCAC
CCCAGAAGACCTGCCTGATCTGTGGAGATGAAGCTTCTGGGTGCTCACTATGGAGCTCACATGTGGAAG
CTGCAAGGTCTTCTTCAAAGAGCCGCTGAAGGGAAACAGAAGTACCTGTGCGCCAGCAGAAATGATTGC
ACTATTGATAAATCCGAAGGAAAAATGTCCATCTTGTCTGCGTCTTCGGAAATGTTATGAAGCAGGGATGA
CTCTGGGAGCCCGAAGCTGAAGAACTGGTAATCTGAACTACAGGAGGAAGGAGAGGCTTCCAGCAC
CACCAGCCCACTGAGGAGACAACCCAGAAGCTGACAGTGTACACATTGAAGGCTATGAATGTCAGCCC
ATCTTTCTGAATGTCCTGGAAGCCATTGAGCCAGGTGTAGTGTGTGCTGGACACGACAACAACAGCCCG
ACTCCTTTGCAGCCTTGCTCTCTAGCCTCAATGAACTGGGAGAGAGACAGCTTGTACACGTGGTCAAGTG
GGCCAAGGCCTTGCTGGCTCCGCAACTTACAGTGGACGACCAGATGGCTGTCATTGACTACTCTGG
ATGGGGCTCATGGTGTGGCCATGGGCTGGCGATCCTTACCAATGTCAACTCCAGGATGCTCTACTTCCG
CCCCTGATCTGGTTTTCAATGAGTACCGCATGCACAAGTCCCGGATGTACAGCCAGTGTGTCGAATGAG
GCACCTCTCTCAAGATTTGGATGGCTCCAAATCACCCCCAGGAATCCTGTGCATGAAAGCACTGCTA
CTCTTCAGCATTATCCAGTGGATGGGCTGAAAAATCAAAAATCTTTGATGAACTTCAATGAACTACA
TCAAGGAACTCGATCGTATCATTGCATGCAAAAAGAAAAATCCCACATCTGCTCAAGACGCTTCTACCA
GCTCACCAAGCTCCTGGACTCCGTGCAGCCTATTGCGAGAGAGCTGCATCAGTTCACTTTGACCTGCTA
ATCAAGTCACACATGGTGAAGCTGGACTTCCGGAAATGATGGCAGAGATCATCTCTGTGCAAGTGCCCA
AGATCCTTTCTGGAAAGTCAAGCCCATCTATTTCCACACCCAGTGA
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Restriction Sites:	Please inquire
ACCN:	NM_001011645



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OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.</p>
Components:	<p>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).</p>
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.
RefSeq:	<u>NM_001011645.1</u> , <u>NP_001011645.1</u>
RefSeq Size:	1765 bp
RefSeq ORF:	1167 bp
Locus ID:	367
UniProt ID:	<u>P10275</u>
Cytogenetics:	Xq12
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
Protein Pathways:	Oocyte meiosis, Pathways in cancer, Prostate cancer

Gene Summary:

The androgen receptor gene is more than 90 kb long and codes for a protein that has 3 major functional domains: the N-terminal domain, DNA-binding domain, and androgen-binding domain. The protein functions as a steroid-hormone activated transcription factor. Upon binding the hormone ligand, the receptor dissociates from accessory proteins, translocates into the nucleus, dimerizes, and then stimulates transcription of androgen responsive genes. This gene contains 2 polymorphic trinucleotide repeat segments that encode polyglutamine and polyglycine tracts in the N-terminal transactivation domain of its protein. Expansion of the polyglutamine tract from the normal 9-34 repeats to the pathogenic 38-62 repeats causes spinal bulbar muscular atrophy (SBMA, also known as Kennedy's disease). Mutations in this gene are also associated with complete androgen insensitivity (CAIS). Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2017]

Transcript Variant: This variant (2, also known as AR45 in PMID:15634333) contains an alternate exon in the 5' region and initiates translation at an alternate start codon compared to variant 1. The encoded isoform (2) has a distinct and shorter N-terminus than isoform 1.

Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.