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Product datasheet for SC114220

Androgen Receptor (AR) (NM_000044) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Androgen Receptor (AR) (NM_000044) Human Untagged Clone
Tag:	Tag Free
Symbol:	Androgen Receptor
Synonyms:	AIS; AR8; DHTR; HUMARA; HYSP1; KD; NR3C4; SBMA; SMAX1; TFM
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_000044 edited
AGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCG TCAGAATT
TTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACG AGGAAAAACAAAAAAG
CCGAAATAAAAGAAAAAGATAATAACTCAGTTCT TATTTGCACCTACTTCAGTGGACA
CTGAATTTGGAAGGTGGAGGATTTTG TTTTTTTCTTTTAAGATCTGGGCATCTTTTGA
ATCTACCCTTCAAGTATT AAGAGACAGACTGTGAGCCTAGCAGGGCAGATCTTGTCCA
CCGTGTGTCT TTTTCTGCACGAGACTTTGAGGCTGTCAGAGCGCTTTTTGCGTGGTTG
CT CCCGCAAGTTTCCTTCTCTGGAGCTTCCCGCAGGTGGGCAGCTAGCTGCA GCGA
CTACCGCATCATCACAGCCTGTTGAACTCTTCTGAGCAAGAGAAGG GGAGGCGGGGTA
AGGGAAGTAGGTGGAAGATTCAGCCAAGCTCAAGGATG GAAGTGCAGTTAGGGCTGGG
AAGGGTCTACCCTCGGCCGCCGTCCAAGAC CTACCGAGGAGCTTTCCAGAATCTGTTC
CAGAGCGTGCGCGAAGTGATCC AGAACCCGGGCCCCAGGCACCCAGAGGCCGCGAGCG
CAGCACCTCCCGGC GCCAGTTTGCTGCTGCTGCAGCAGCAGCAGCAGCAGCAGCAGCA
GCAGCA GCAGCAGCAGCAGCAGCAGCAGCAGCAAGAGACTAGCCCCAGGCAGCAGC
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CCTGGTCCTGGATGAGGAACAGCAACCTTCACAGCCGCAGTC GGCCCTGGAGTGCCAC
CCCGAGAGAGGTTGCGTCCCAGAGCCTGGAGCCG CCGTGGCCGCCAGCAAGGGGCTGC
CGCAGCAGCTGCCAGCACCTCCGGAC GAGGATGACTCAGCTGCCCCATCCACGTTGTC
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AA GGCAGCAGCAGCGGGAGAGCGAGGGAGGCCTCGGGGGCTCCCACTTCCTC CAAG
GACAATTACTTAGGGGGCACTTCGACCATTTCTGACAACGCCAAGG AGTTGTGTAAGG
CAGTGTCGGTGTCCATGGGCCTGGGTGTGGAGGCGTTG GAGCATCTGAGTCCAGGGGA
ACAGCTTCGGGGGGATTGCATGTACGCCCC ACTTTTGGGAGTTCCACCCGCTGTGCGT
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GCTAGA AGGCGAGAGCCTAGGCTGCTCTGGCAGCGCTGCAGCAGGGAGCTCCGGGA

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CACTTGAACTGCCGTCTACCCTGTCTCTCTACAAGTCCGGAGCACTGGAC GAGGCAGC
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GTTTAGAGAGCTAA GATTATCTGGGGAAATCAAAACAAAAACAAGCAAACAAAAAAAA
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TCCCGGGTGGCATCCCTGTGACCCCTCCCCAGTGCCT

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000044 unedited
CCCCTGTTCAGGAATATTTGTNAATACGAACTNCACTATGAGGGNCTGGCCGCGNAATTC
GGCACGAGGGAAAAACAAAAAAGCCGAAATAAAAGAAAAAGAAATAACTCAGTTCTTATT
TGCACCTACTTCAGTGGACACTGAATTTGGAAGGTGGAGGATTTTGTTTTTTTCTTTTAA
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GGGCAGATCTTGTCCACCGTGTGTCTTTTTCTGCACGAGACTTTGAGGCTGTCAGAGCGC
TTTTTGCGTGGTTGCTCCCGCAAGTTTCCTTCTCTGGAGCTTCCCGCAGGTGGGCAGCTA
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CGCAGCACCTCCCGGCGCCAGTTTGCTGCTGCTGCAGCAGCAGCAGCAGCAGCAGCAGCA
GCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAAGAGACTAGCCCCAGGCAGCAGCAGCA
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CCTGGATGAGGAACAGNCACCTTCACAGCCGCAGTCGGCCCTGGAGTGCCACCCCGAGAG
AGGTTGCGTCCCTAGAGCTGNAGCCGCCGTGGCCGCCAGCAGGNGCTGCCGCAGCAGCTG
CCAGCACTTCTGAN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000044 unedited
GGGGGGGNGGGCCCCCNCCCCCATTTTAAANNNNNNTTTTGTGTAGNCCGCGGCCGCTTT
CTANNATCGAGTTTTTTTTTTTTTTTTTTGTTTGCTTGTTTTTGTTTTGATTTCCCCAGA
TAATCTTAGCTCTCTAAACTTCCCGTGGCATAAGATAAGTAAACGTTTGTGTGGCTGGCA
CAGAGTAGTGCTGTAAACAAGCACAACTTGACACTGGGCCATATGAGGATCATCACAGAT
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GAAATTCCCCAAGGCACTGCAGAGGAGTAGTGCAGAGTTATAACAGGCAGAAGACATCTG
AAAGGGGGCATGAGCTGGGGTGGGGAAATAGGGTTTCCAATGCTTCACTGGGTGTGGAAA
TAGATGGGCTTGACTTTCCCAGAAAGGATCTTGGGCACTTGCACAGAGATGATCTCTGCC
ATCATTTCCGGAAAGTCCACGCTCACCATGTGTGACTTGATTAGCAGGTCAAAAGTGAAC
TGATGCAGCTCTCTCGCAATAGGCTGCACGGAGTCCAGGAGCTTGGTGAGCTGGTAGAAG
CGTCTTGAGCANGATGTGGGATTTTTTCTTTTGCATGNCATGATACGATCGAGTTCCTTG
ATGTAGNTCATTCGAAGTTCATCAAAGAAATTTTGATTTTTCAGCCCATCCACTGGNATA
ATGCTGAAGAGTANCAGTGCTTTCATGCACAGGAAATTCTGGGGGGGTGATTTTGNAGCC
ATCCAAACTCCTGAAAGAAGTGCCTCATTCGGACACACTGCCTGTACCTCCG

Restriction Sites: NotI-NotI

ACCN: NM_000044

Insert Size: 4000 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
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_000044.2, NP_000035.2
RefSeq Size:	4314 bp
RefSeq ORF:	2763 bp
Locus ID:	367
UniProt ID:	P10275
Cytogenetics:	Xq12
Domains:	HOLI, Androgen_recep, zf-C4
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 (1, also known as AR-FL in PMID:20823238) represents the longest transcript and encodes the longest 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.