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Product datasheet for RC215316

Androgen Receptor (AR) (NM_000044) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Androgen Receptor (AR) (NM_000044) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Androgen Receptor
Synonyms:	AIS; AR8; DHTR; HUMARA; HYSP1; KD; NR3C4; SBMA; SMAX1; TFM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC215316 representing NM_000044.
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
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Protein Sequence:

>Peptide sequence encoded by RC215316
Blue=ORF Red=Cloning site Green=Tag(s)

MEVQLGLGRVYPRPPSKTYRGAFQNLFQSVREVIQNPGPRHPEAASAAPPGASLLLLQQQQQQQQQQQQ
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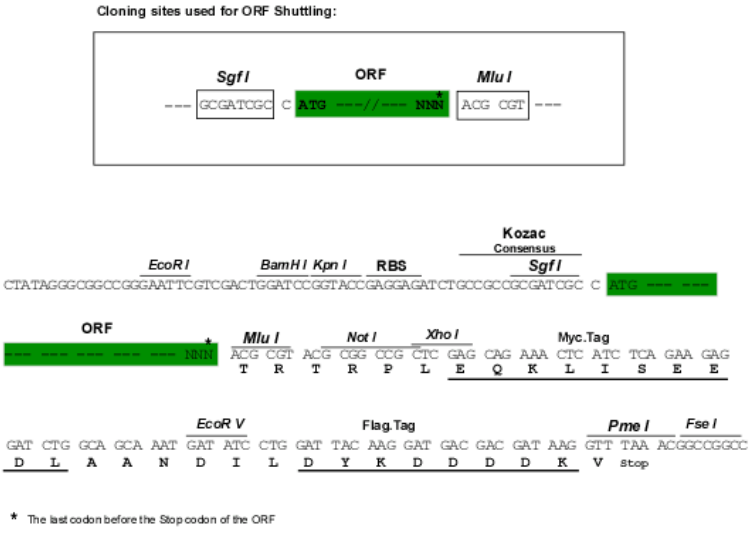
YFAPDLVFNEYRMHKSRMYSQCVRMRHLSQEFGWLQITPQEFLCMKALLLFSIIPVDGLKNQKFFDELR
MNYIKELDRIIACKRKNPTSCSRRFYQLTKLLDSVQPIARELHQFTFDLLIKSHMVSVDFPEMMAEIIS
VQVPKILSGKVKPIYFHTQ
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2427_d04.zip

Restriction Sites: SgfI-MluI

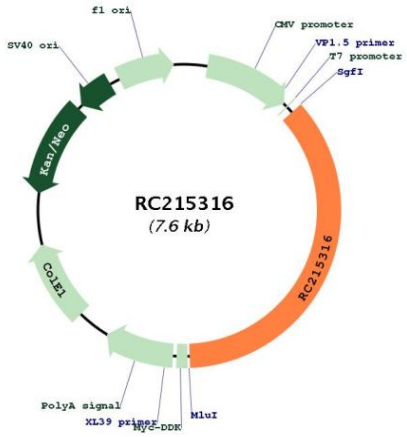
Cloning Scheme:



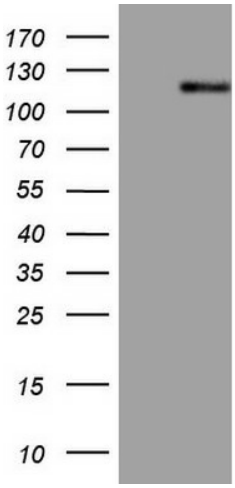
ACCN:	NM_000044
ORF Size:	2751 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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:	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 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
MW:	98.7 kDa

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]

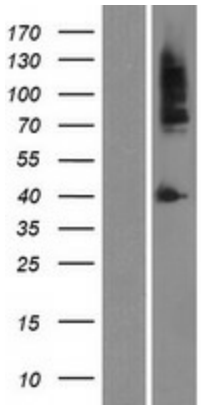
Product images:



Circular map for RC215316



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY AR (Cat# RC215316, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-AR (Cat# [TA809105])(1:2000). Positive lysates [LY400012] (100ug) and [LC400012] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400012]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215316 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).