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Product datasheet for RC221303

Progesterone Receptor (PGR) (NM_000926) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Progesterone Receptor (PGR) (NM_000926) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Progesterone Receptor
Synonyms:	NR3C3; PR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC221303 representing NM_000926.
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
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GAAGTTTCGGCCATACCTATCTCCCTGGACGGGCTACTCTTCCCTCGGCCCTGCCAGGGACAGGACCCC
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ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAG
GATGACGACGATAAGGTTTAAACGGCCGGCCGCGGT

Protein Sequence:

>Peptide sequence encoded by RC221303
Blue=ORF Red=Cloning site Green=Tag(s)

MTELKAKGPRAPHVAGGPPSPEVGSPLLCRPAAGPFPGSQTSDTLPEVSAIPISLDGLLFPRPCQGQDP
SDEKTQDQQSLSDVEGAYSRAEATRGAGGSSSSPPEKDSGLLDSVLDTLLAPSGPGQSQPSPPACEVTS
SWCLFGPELPEDPPAAPATQRVLSPLMSRSGCKVGDSSGTAAAHKVLPRGLSPARQLLLPASESPHWSG
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LMSIEPDVIYAGHDNTKPDTSSSLLTSLNQLGERQLLSVVKWSKSLPGFRNLHIDDQITLIQYSWMSLM
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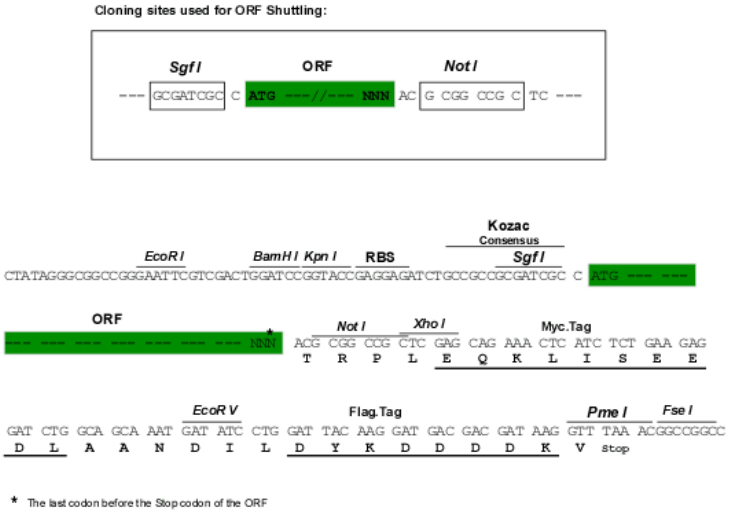
TIPLEGLRSQTQFEEMRSSYIRELIKAIGLRQKGVVSSSQRFYQLTKLLDNLHDLVKQLHLYCLNTFIQ
SRALSVEFPEMMSEVIAAQLPKILAGMVKPLLFHKK
TRPLEQKLISEEDLAANDILDYKDDDDKV

Recombinant protein using RC221303 also available, TP321303

Chromatograms: https://cdn.origene.com/chromatograms/mg3439_c04.zip

Restriction Sites: SgfI-NotI

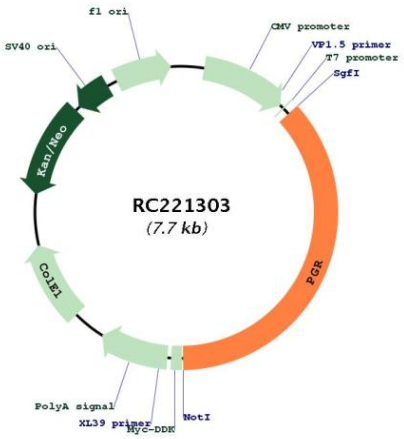
Cloning Scheme:



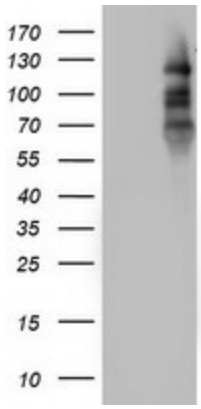
ACCN: NM_000926

ORF Size:	2799 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:	5003 bp
RefSeq ORF:	2802 bp
Locus ID:	5241
UniProt ID:	P06401
Cytogenetics:	11q22.1
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
Protein Pathways:	Oocyte meiosis, Progesterone-mediated oocyte maturation
MW:	99 kDa
Gene Summary:	This gene encodes a member of the steroid receptor superfamily. The encoded protein mediates the physiological effects of progesterone, which plays a central role in reproductive events associated with the establishment and maintenance of pregnancy. This gene uses two distinct promotors and translation start sites in the first exon to produce several transcript variants, both protein coding and non-protein coding. Two of the isoforms (A and B) are identical except for an additional 165 amino acids found in the N-terminus of isoform B and mediate their own response genes and physiologic effects with little overlap. [provided by RefSeq, Sep 2015]

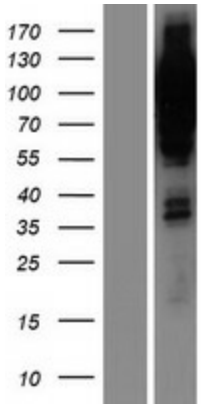
Product images:



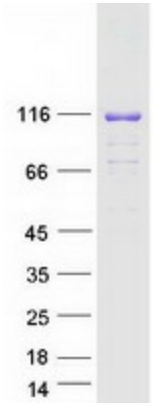
Circular map for RC221303



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PGR (Cat# RC221303, 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-PGR antibody (Cat# [TA802702]). Positive lysates [LY424456] (100ug) and [LC424456] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424456]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221303 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PGR protein (Cat# [TP321303]). The protein was produced from HEK293T cells transfected with PGR cDNA clone (Cat# RC221303) using MegaTran 2.0 (Cat# [TT210002]).