

Product datasheet for **RC210314**

PRKRIR (THAP12) (NM_004705) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRKRIR (THAP12) (NM_004705) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRKRIR
Synonyms:	DAP4; P52rIPK; PRKRIR; THAP0
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC210314 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGAACCTCTGCGCTGCCCCAACTGCACGCGGAAGAGCACGCAGTCCGACTTGGCCTTCTTCAGGT
 TCCCGCGGGACCTGCCAGATGCCAGAAGTGGGTGGAGAACTGTAGGAGAGCAGACTTAGAAGATAAAAC
 ACCTGATCAGCTAAATAAACATTATCGATTATGTGCCAAACATTTTGAGACCTCTATGATCTGTAGAACT
 AGTCCTTATAGGACAGTTCTTCGAGATAATGCAATACCAACAATATTTGATCTTACCAGTCATTTGAACA
 ACCCACATAGTAGACACAGAAAACGAATAAAGAAGTGAAGATAAAATCAGGACACTGAAGCAGAA
 AAAAATTGATGAACTTCTGAGCAGGAACAAAACATAAAGAAACCAACAATAGCAATGCTCAGAACCCC
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 GGCTGATGAAATCCCAGAAGTCTCTTTACTCCAGATAACTTTTCAGGCACTGCTGGAGTGTGGATAAAT
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 GTCAGAGCTTCTACAGATAATTCCGAACTGTGGAAAATACC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence: >RC210314 protein sequence
 Red=Cloning site Green=Tags(s)

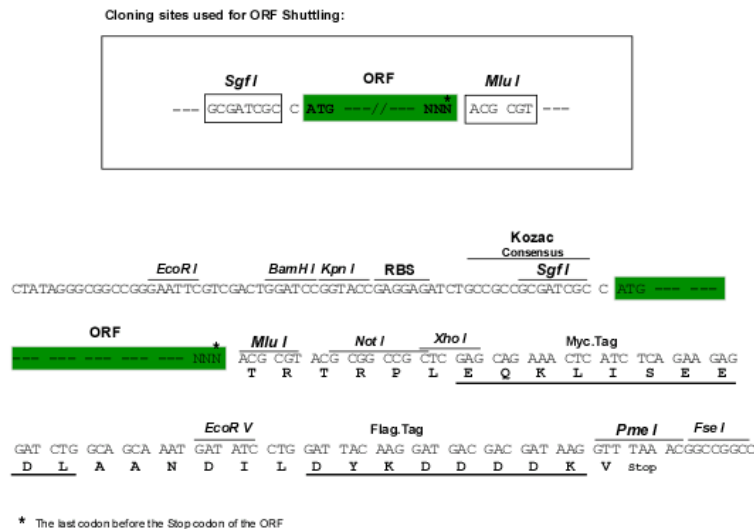
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 DLPNPDTLSAELHCWRIKWKHRGKDIELPSTIYEALHLPDIKFFPNVYALLKVLCLPVMKVENERYENG
 RKRLKAYLRNTLTDQRSSNLALLNINFDIKHDLDLMVDYIKLYTSKSELPTDNSETVENT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6585_b04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004705

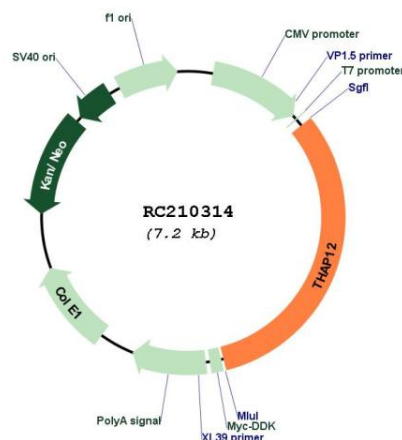
ORF Size: 2283 bp

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](#)

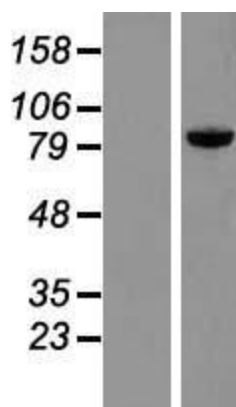
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_004705.4</u>
RefSeq Size:	3202 bp
RefSeq ORF:	2286 bp
Locus ID:	5612
UniProt ID:	<u>O43422</u>
Cytogenetics:	11q13.5
Domains:	DM3
Protein Families:	Druggable Genome
MW:	87.7 kDa
Gene Summary:	Upstream regulator of interferon-induced serine/threonine protein kinase R (PKR). May block the PKR-inhibitory function of DNAJC3, resulting in restoration of kinase activity and suppression of cell growth.[UniProtKB/Swiss-Prot Function]

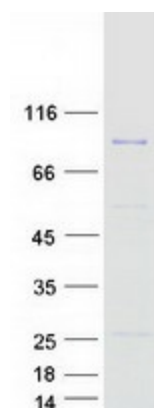
Product images:



Circular map for RC210314



Western blot validation of overexpression lysate (Cat# [LY417832]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210314 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified THAP12 protein (Cat# [TP310314]). The protein was produced from HEK293T cells transfected with THAP12 cDNA clone (Cat# RC210314) using MegaTran 2.0 (Cat# [TT210002]).