

Product datasheet for **RR209032**

Prkra (NM_001024780) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Prkra (NM_001024780) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Prkra
Synonyms: RAX
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR209032 representing NM_001024780
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCCCACAGCAGGCATCGTGCCGAGGCCCGCCGCTGCAGCGCGAGGACAGCGGGACCTTCAGTTTGG
GCAAGATGATAACAGCTAAGCCTGGGAAAACACCGATTTCAGGTATTGCACGAGTACGGCAGCAAGACCAA
GAACATCCAGTTTATGAATGTGAAAGATCCGATGTGCAAGTACACGTGCCCACTTTCACCTTCAGAGTA
ACCGTTGGTGACATAACTTGACAGGTGAAGGGACGAGTAAGAAGCTGGCGAAGCACAGAGCTGCAGAGG
CTGCCATAAACATTTTGAAGCCAATGCAAGTATTTGCTTTGCAGTTCCTGACCCCTTAATGCCTGATCC
ATCCAAACAGCCAAAGAACCAGCTGAATCCAATTGGCTCATTACAGGAATTAGCAATTCACCATGGCTGG
CGGCTTCCTGAATATACCCTTTCCAGGAAGGAGGACCCGCTCATAAGAGAGAATATACCACGATTTGCA
GGCTAGAGTCATTCATGGAACTGGAAAGGGGGCATCAAAAAACAAGCAAGAGAAAACGCTGCTGAGAA
ATTCTCGCCAAATTTAGTAATTTTCTCCAGAGAACCACATTTCTCTAACGAATGTGGTCGGACATTCC
CTGGGATGCACTTGGCACTCCTTGAGGAATCCCTGGTAAAAGATCAACCTTCTGAAAAGGAGCCTCC
TCAGTCTGCCAACACAGACTACATCCAGCTGCTCAGTGAGATAGCCAAAGAGCAAGGCTTCAGTATAAC
ATACTTGATATAGAGGAGCTGAGTGCCAACGGGCAGTATCAGTGTCTCGCAGAGCTGTCCACCACTCCC
ATCACCGTGTGTCATGGCTCAGGCATCTCCTGTGGCAATGCCAGAGTGACGCCGCTCACATGCCCTGC
AGTATCTAAAGATAATAGCAGAAAGAAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RR209032 representing NM_001024780
Red=Cloning site Green=Tags(s)

MSHSRHRAEAPLQREDSGTFSLGKMITAKPGKTPIQVLHEYGTKTKNIPVYECERSDVQVHVPTFFTRV
 TVGDITCTGEGTSKKLAKHRAEAAINILKANASICFVDPDPLMPDPSKQPKNQLNPIGSLQELAIHHGW
 RLPeyTLSQEGGPAHKREYTTICRLESFMETGKGASKKQAKRNAAEKFLAKFSNISPENHISL TNVVGH
 LGCTWHSRLRNSPGEKINLLKRSLLSLPNTDYIQLLSEIAKEQGF SITYLDIEEL SANGQYQCLAELSTSP
 ITVCHGSGISCGNAQSDAAHNALQYLKIIAERK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

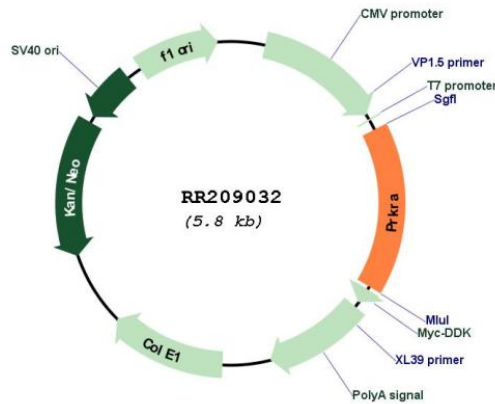
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001024780

ORF Size: 939 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:	<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:	NM_001024780.1 , NP_001019951.1
RefSeq Size:	1589 bp
RefSeq ORF:	942 bp
Locus ID:	311130
UniProt ID:	Q4V8C7
Cytogenetics:	3q24
MW:	34.4 kDa
Gene Summary:	Activates EIF2AK2/PKR in the absence of double-stranded RNA (dsRNA), leading to phosphorylation of EIF2S1/EF12-alpha and inhibition of translation and induction of apoptosis. Required for siRNA production by DICER1 and for subsequent siRNA-mediated post-transcriptional gene silencing. Does not seem to be required for processing of pre-miRNA to miRNA by DICER1. Promotes UBC9-p53/TP53 association, sumoylation and phosphorylation of p53/TP53 at 'Lys-386' at 'Ser-392' respectively and enhances its activity in a EIF2AK2/PKR-dependent manner (By similarity).[UniProtKB/Swiss-Prot Function]