

## Product datasheet for MR205941

### Prkar1a (NM\_021880) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prkar1a (NM_021880) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prkar1a
Synonyms:	1300018C22Rik; R; Rlalpha; Tse; Tse-; Tse-1; Tse1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205941 representing NM_021880 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGTCTGGCAGTATGGCAACCAGTGAAGGAGCGGAGTCTCCGGGAATGCGAGCTCTATGTGCAGA  
AGCACAATATCCAGGCCCTGCTGAAGGACTCCATCGTGCAGCTGTGCACTACGCGGCCCGAGAGGCCCAT  
GGCATTCTTCGGGAATACTTTGAGAGGTTGGAGAAGGAGGAGGCAAGACAGATTCAGTGCTACAGAAA  
ACCGGCATCCGTACTGACTCGAGGGAGGACGAGATCTCTCCACCCCCAATCCAGTGGTGAAGGGCC  
GACGGCGCCGAGGTGCTATCAGTGCTGAAGTTTACTGAGGAGGATGCTGCCTCTACGTTAGAAAGGT  
TATTCAAAAGATTATAAGACAATGGCTGCTTTAGCCAAGGCCATCGAAAAGAATGTGCTGTTTTACAC  
CTTGATGATAACGAGAGAAGTGACATTTTTGATGCTATGTTTCCAGTCTCCTTTATTGCTGGAGAGACGG  
TTATTCAGCAAGGTGATGAAGGGGATAACTTCTATGTGATTGATCAAGGAGAAATGGATGCTATGTCAA  
TAATGAATGGCAACCAGTGTGGGGAAGGAGGAGCTTTGGAGAGCTGGCTTTGATTTATGGAACACCC  
AGAGCAGCCACTGTCAAAGCAAAGACAAACGTGAACTGTGGGCATCGACCGAGACAGTACCGAAGAA  
TCCTCATGGGAAGCACTCTGCGAAAGAGGAAGATGTGAAGAATTCCTAGTAAAGTGTCTATTTTAGA  
GTCTCTGGACAAGTGGGAGCGTCTCACAGTAGCCGATGCATTGGAGCCTGCCAGTTTGAAGATGGACAG  
AAGATCGTGGTGAAGGAGAGCCGGGGATGAGTCTTCATATTTAGAGGGCACAGCTGCTGTGCTGC  
AGCGTCCGTGAGAAAACGAAGAATTTGTTGAAGTGGGACGACTGGGGCCTTCTGATTATTTGGTGAAT  
TGCCCTGCTGATGAATCGTCTCGGGCTGCCACTGTGGTTGCCCGGGGCCCTTTGAAGTGCCTAAGTTG  
GACCGCCTCGGTTTGAACGCGTCTTGCCCGTCTCAGACATCCTCAAGCGGAACATCCAGCAGTACA  
ACAGCTTCGTGCCCTGTCCGTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205941 representing NM\_021880  
Red=Cloning site Green=Tags(s)

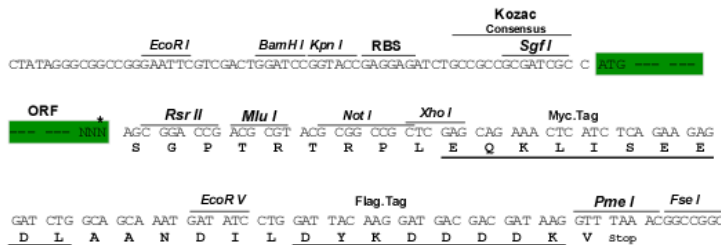
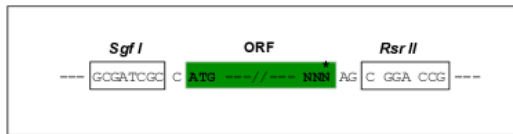
MASGSMATSEERSLRECELYVQKHNIQALLKDSIVQLCTTRPERPMAFLREYFERLEKEEARQIQCLQK  
 TGIRTSREDEISPPPPNPVVKGRRRRGAISAEVYTEEDAASYVRKVIPKDYKTMALAKAIEKNVLF  
 SHLDDNERSDIFDAMPVSVFIAGETVIQQGDEGDNFYVIDQGEMDVYVNNNEWATSVGEGGSF  
 GELAL IYGT  
 RAATVKAKTNVKLWGI DRDSYRRILMGSTLRKRKMYEEFLSKVSI LESLDKWERLTVADALEP  
 VQFEDGQ  
 KIVVQGE PGDEFFIILEGTA AVLQRSENEEFVEVGRLGPSDFGEIALLMNRPRAA TVVARG  
 PLKCVKL  
 DRPRFERVLGPCSDILKRNIQQYNSFVLSLV

SGPTRTRRLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_021880

**ORF Size:** 1143 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.

**RefSeq:** [NM\\_021880.4](#)

**RefSeq Size:** 3324 bp

**RefSeq ORF:** 1146 bp

**Locus ID:** 19084

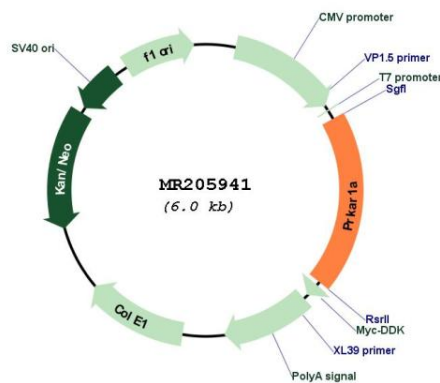
**UniProt ID:** [Q9DBC7](#)

**Cytogenetics:** 11 72.33 cM

**MW:** 43.6 kDa

**Gene Summary:** The encoded protein is a regulatory subunit of the cAMP-dependent protein kinase (PKA) complex, which is responsible for transducing most of the cAMP signals in eukaryotic cells. The inactive PKA complex contains two regulatory and two catalytic subunits. Binding of cAMP dissociates the complex, allowing monomeric catalytic subunits to phosphorylate cytosolic proteins or induce gene expression in the nucleus. Several transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Sep 2015]

## Product images:



Circular map for MR205941