

# **Product datasheet for RC237022**

## PRKACB (NM\_001300915) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** PRKACB (NM\_001300915) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: PRKACB

Synonyms: CAFD2; PKA C-beta; PKACB

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC237022 representing NM\_001300915
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC237022 representing NM\_001300915

Red=Cloning site Green=Tags(s)

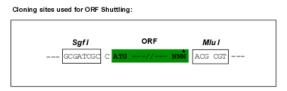
MSARKSSDASACSSSEISDSFVKEFLAKAKEDFLKKWENPTQNNAGLEDFERKKTLGTGSFGRVMLVKHK ATEQYYAMKILDKQKVVKLKQIEHTLNEKRILQAVNFPFLVRLEYAFKDNSNLYMVMEYVPGGEMFSHLR RIGRFSEPHARFYAAQIVLTFEYLHSLDLIYRDLKPENLLIDHQGYIQVTDFGFAKRVKGRTWTLCGTPE YLAPEIILSKGYNKAVDWWALGVLIYEMAAGYPPFFADQPIQIYEKIVSGKQNF

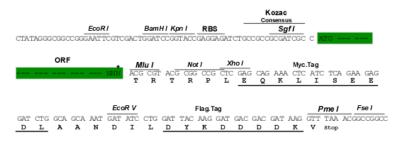
#### TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** 

Sgfl-Mlul

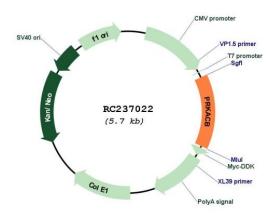
**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

## Plasmid Map:



**ACCN:** NM\_001300915

ORF Size: 792 bp

## PRKACB (NM\_001300915) Human Tagged ORF Clone - RC237022

**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.

NM 001300915.2 RefSeq:

RefSeq Size: 2156 bp RefSeq ORF: 795 bp Locus ID: 5567 **UniProt ID:** P22694

Cytogenetics:

1p31.1 **Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Apoptosis, Calcium signaling pathway, Chemokine signaling pathway, Dilated

cardiomyopathy, Gap junction, GnRH signaling pathway, Hedgehog signaling pathway, Insulin

signaling pathway, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Olfactory transduction, Oocyte meiosis, Prion diseases, Progesterone-mediated oocyte maturation, Taste transduction, Vascular smooth muscle contraction, Vibrio cholerae

infection, Wnt signaling pathway

MW: 30.9 kDa

The protein encoded by this gene is a member of the serine/threonine protein kinase family. **Gene Summary:** 

> The encoded protein is a catalytic subunit of cAMP (cyclic AMP)-dependent protein kinase, which mediates signalling though cAMP. cAMP signaling is important to a number of processes, including cell proliferaton and differentiation. Multiple alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul

2014]