

## Product datasheet for **RG236896**

### PRKACB (NM\_001300917) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PRKACB (NM_001300917) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRKACB
Synonyms:	CAFD2; PKA C-beta; PKACB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG236896 representing NM_001300917. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGATTGTTGAAAGAGTTTCTAGCCAAAGCCAAAGAAGACTTTTTGAAAAATGGGAGAATCCAAC
CAGAATAATGCCGGACTTGAAGATTTTAAAGGAAAAAACCTTGAACAGGTTTCATTTGGAAGAGTC
ATGTTGGTAAAACACAAAGCCACTGAACAGTATTATGCCATGAAGATCTTAGATAAGCAGAAGGTTGTT
AACTGAAGCAAATAGAGCATACTTTGAATGAGAAAAGAATATTACAGGCAGTGAATTTTCCTTCCTT
GTTGACTGGAGTATGCTTTAAGGATAATTCTAATTTATACATGGTTATGGAATATGTCCTGGGGGT
GAAATGTTTTACATCTAAGAAGATTGGAAGGTTTCAGTGAGCCCATGCACGGTCTATGCAGCTCAG
ATAGTGCTAACATTTCGAGTACCTCCATTCACTAGACCTCATCTACAGAGATCTAAACCTGAAAATCTC
TTAATTGACCATCAAGGCTATATCCAGGTCACAGACTTTGGGTTTGCCAAAAGAGTTAAAGGCAGAACT
TGGACATTATGTGGAACCTCAGAGTATTTGGCTCCAGAAATAATTCTCAGCAAGGGCTACAATAAGGCA
GTGGATTGGTGGGCATTAGGAGTGCTAATCTATGAAATGGCAGCTGGCTATCCCCATTCTTTGCAGAC
CAACCAATTCAGATTTATGAAAAGATTGTTTCTGGAAAGAAGCTTT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



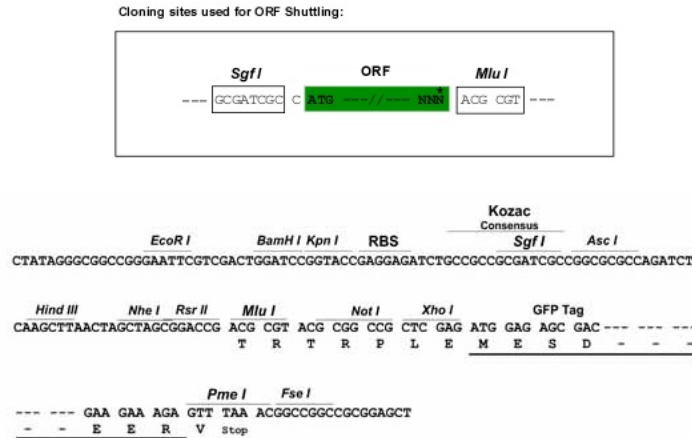
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**Protein Sequence:** >Peptide sequence encoded by RG236896  
 Blue=ORF Red=Cloning site Green=Tag(s)

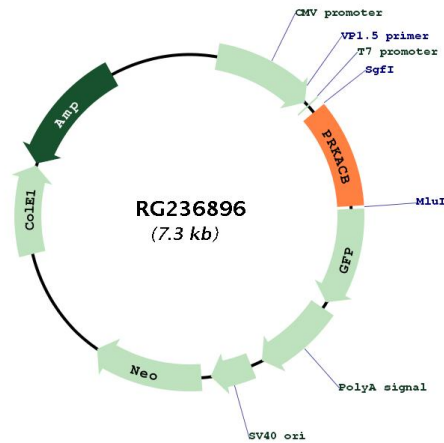
MGLLKEFLAKAKEDFLKKWENPTQNNAGLEDFERKKTLTGTSFGRVMLVKHKATEQYYAMKILDKQKVV  
 KLKQIEHTLNEKRILQAVNFPFLVRLLEYAFKDNSNLYMVMYVPGGEMFSLRRIGRFSEPHARFYAAQ  
 IVLTFEYLHSLDLIYRDLKPENLLIDHQYIQVTDGFAKRVKGRWTLCGTPEYLAPEIILSKGYNKA  
 VDWWALGVLIIYEMAAGYPPFFADQPIQIYEKIVSGKNF  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNTAVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001300917

<b>ORF Size:</b>	735 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>RefSeq:</b>	<a href="#">NM_001300917.2</a>
<b>RefSeq Size:</b>	1961 bp
<b>RefSeq ORF:</b>	738 bp
<b>Locus ID:</b>	5567
<b>UniProt ID:</b>	<a href="#">P22694</a>
<b>Cytogenetics:</b>	1p31.1
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	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
<b>MW:</b>	29 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a member of the serine/threonine protein kinase family. The encoded protein is a catalytic subunit of cAMP (cyclic AMP)-dependent protein kinase, which mediates signalling through cAMP. cAMP signaling is important to a number of processes, including cell proliferation and differentiation. Multiple alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2014]