

## Product datasheet for **RG232571**

### PRKACB (NM\_001242860) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PRKACB (NM_001242860) 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:	>RG232571 representing NM_001242860 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGTGCACGCAAAATCATCAGATGCATCTGCTTCTCCTTTCAGAAATATCTGATTCCTTTGTGAAAG  
AGTTTCTAGCCAAAGCCAAAGAAGACTTTTTGAAAAATGGGAGAATCCAACCTCAGAATAATGCCGGACT  
TGAAGATTTTAAAGGAAAAAACCTTGAACAGGTTTCAATTTGGAAGAGTCATGTTGGTAAAACACAAA  
GCCACTGAACAGTATTATGCCATGAAGATCTTAGATAAGCAGAAGGTTGTTAACTGAAGCAAATAGAGC  
ATACTTTGAATGAGAAAAGAATATTACAGGCAGTGAATTTTCTTCTTCTGTTGACTGGAGTATGCTTT  
TAAGGATAATTCTAATTTATACATGGTTATGGAATATGTCCCTGGGGGTGAAATGTTTTACATCTAAGA  
AGAATTGGAAGGTTCAAGTGAAGCCCATGCACGGTCTATGCAGCTCAGATAGTGCTAACATTCGAGTACC  
TCCATTCACTAGACCTCATCTACAGAGATCTAAAACCTGAAAATCTCTTAATTGACCATCAAGGCTATAT  
CCAGGTACAGACTTTGGGTTTGCCAAAAGAGTTAAAGGCAGAATTGGACATTATGTGAACTCCAGAG  
TATTTGGCTCCAGAAATAATTCTCAGCAAGGGCTACAATAAGGCAGTGGATTGGTGGCATTAGGAGTGC  
TAATCTATGAAATGGCAGCTGGCTATCCCCATCTTTGCAGACCAACCAATTCAGATTTATGAAAAGAT  
TGTTTCTGAAAAGGTCGATTCCCATCCCACTTCAGTTCAGATCTCAAGGACCTTCTACGGAACCTGCTG  
CAGGTGGATTTGACCAAGAGATTTGAAAATCTAAGAATGGTGTGATGATATAAAAACTCACAAGTGGT  
TTGCCACGACAGATTGGATTGCTATTTACCAGAGGAAGGTTGAAGCTCCATTCATACCAAAGTTTAGAGG  
CTCTGGAGATACCAGCAACTTTGATGACTATGAAGAAGAAGATATCCGTGTCTCTATAACAGAAAAATGT  
GCAAAAAGAATTTGGTGAATTT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG232571 representing NM\_001242860  
Red=Cloning site Green=Tags(s)

MSARKSSDASACSSSEISDSFVKEFLAKAKEDFLKKWENPTQNNAGLEDFERKKTTLGTGSFGRVMLVKHK  
 ATEQYYAMKILDKQKVVVLKQIEHTLNEKRILQAVNFPFLVRLLEYAFKDNSNLYMMEYVPGGEMFSLHR  
 RIGRFSEPHARFYAAQIVLTFEYLHSLDLIYRDLKPENLLIDHQYIQVTDGFGAKRVKGRWTWLCGTPE  
 YLAPEIILSKGYNKAVDWWALGVLIIYEMAAGYPPFFADQPIQIYEKIVSGKVRFPSPHFSSDLKDLLRNL  
 QVDLTKRFGNLKNGVSDIKTHKWFATTDWIAIYQRKVEAPFIPKFRGSGDTSNFDDYEEEDIRVSI TEK  
 AKEFGEF

TRTRPLE - GFP Tag - V

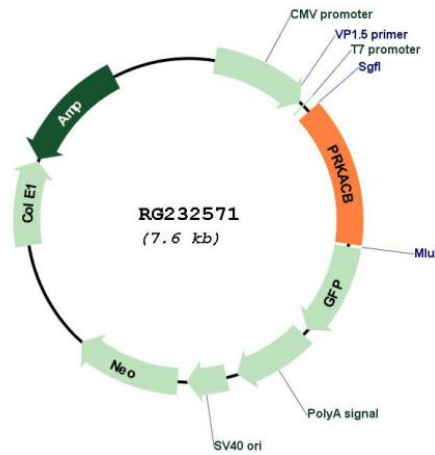
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_001242860

<b>ORF Size:</b>	1071 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>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001242860.2</a>
<b>RefSeq Size:</b>	4324 bp
<b>RefSeq ORF:</b>	1074 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>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]