

## Product datasheet for **RG202131**

### PRKACB (NM\_207578) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PRKACB (NM_207578) 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:	>RG202131 representing NM_207578 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGAACGCGGCGACCGCCAAGAAAGGCAGCGAGGTGGAGAGCGTGAAAGAGTTTCTAGCCAAAGCCA  
AAGAAGACTTTTTGAAAAATGGGAGAATCCAACCTCAGAATAATGCCGGACTTGAAGATTTGAAAGGAA  
AAAAACCTTGGAACAGGTTTCAATTTGGAAGAGTCATGTTGGTAAAACACAAAGCCACTGAACAGTATTAT  
GCCATGAAGATCTTAGATAAGCAGAAGGTTGTTAACTGAAGCAAATAGAGCATACTTTGAATGAGAAAA  
GAATATTACAGGCAGTGAATTTCTTTCTTGTTCGACTGGAGTATGCTTTTAAGGATAATTCTAATTT  
ATACATGGTTATGGAATATGTCCCTGGGGTGAATGTTTTACATCTAAGAAGAATTGGAAGGTTCACT  
GAGCCCATGCACGGTCTATGCAGCTCAGATAGTGCTAACATTCGAGTACCTCCATTCACTAGACCTCA  
TCTACAGAGATCTAAAACCTGAAATCTCTAATTGACCATCAAGGCTATATCCAGGTCACAGACTTTGG  
GTTTGCCAAAAGAGTTAAAGGCAGAACTTGGACATTATGTGGAATCCAGAGTATTTGGCTCCAGAAATA  
ATTCTCAGCAAGGGCTACAATAAGGCAGTGGATTGGTGGGCATTAGGAGTGCTAATCTATGAAATGGCAG  
CTGGCTATCCCCATTCTTGCAGACCAACCAATTCAGATTTATGAAAAGATTGTTTCTGAAAAGAACTT  
T

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG202131 representing NM\_207578  
 Red=Cloning site Green=Tags(s)

MGNAATAKKGSEVESVKEFLAKAKEDFLKKWENPTQNNAGLEDFERKKT LGTGSFGRVMLVKHKATEQYY  
 AMKILDKQKVVKLKQIEHTLNEKRILQAVNFPFLVRLLEYAFKDNSNLYMVMEYVPGGEMFSLRRIGRFS  
 EPHARFYAAQIVLTFEYLHSLDLIYRDLKPENLLIDHQGYIQVTDGFAKRVKGRWTLCGTPPEYLAPEI  
 ILSKGYNKAVDWWALGVLIIYEMAAGYPPFFADQPIQIYEKIVSGKNF

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_207578

**ORF Size:** 771 bp

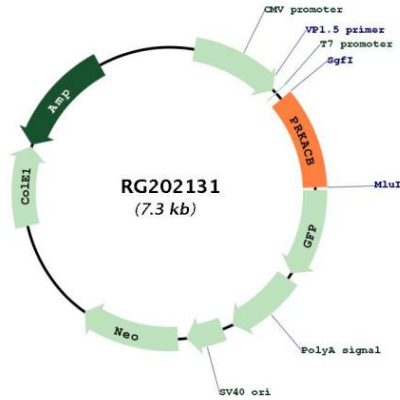
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<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_207578.3</a>
<b>RefSeq Size:</b>	1863 bp
<b>RefSeq ORF:</b>	774 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]

Product images:



Circular map for RG202131