

## Product datasheet for **RG209748**

### PRPK (TP53RK) (NM\_033550) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PRPK (TP53RK) (NM_033550) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRPK
Synonyms:	BUD32; C20orf64; dj101A2; GAMOS4; Nori-2; Nori-2p; PRPK; TPRKB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209748 representing NM_033550 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGCGGCCAGAGCTACTACGCCGGCCGATGGCGAGGAGCCCGCCCGAGGCTGAGGCTCTGGCCG  
CAGCCCGGAGCGGAGCAGCCGCTTCTTGAGCGGCCTGGAGCTGGTGAAGCAGGGTGCCGAGGCGCGCT  
GTTCCGTGGCCACTTCCAGGGCCGCGCGCGGTGATCAAGCACCGCTTCCCAAGGGCTACCGGCACCCG  
GCGCTGGAGGCGCGGCTTGGCAGACGGCGGACGGTGCAGGAGGCCGGGCGCTCCTCCGCTGTCGCCGCG  
CTGGAATATCTGCCCCAGTTGTCTTTTTGTGGACTATGCTTCCAAGTCTTATATATGAAGAAATTGA  
AGGCTCAGTGACTGTTTCGAGATTATATTCAGTCCACTATGGAGACTGAAAAAAGTCCCGAGGCTCTCTCC  
AACTTAGCCAAGACAATTGGGCAGGTTTTGGCTCGAATGCACGATGAAGACCTCATTTCATGGTGATCTCA  
CCACCTCCAACATGCTCCTGAAACCCCCCTGGAACAGCTGAACATTGTGCTCATAGACTTTGGGCTGAG  
TTTCATTTAGCACTTCCAGAGGATAAGGGAGTAGACCTCTATGTCTGGAGAAGGCCTTCTCAGTACC  
CATCCCAACACTGAACTGTGTTTGAAGCCTTTCTGAAGACTACTCCACCTCCTCAAAAAGGCCAGGC  
CAGTGTAAAAAATTAGATGAAGTGCCCTGAGAGGAAGAAAGAGGTCCATGGTTGGG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG209748 representing NM\_033550  
 Red=Cloning site Green=Tags(s)

MAAARATTPADGEEPAPAEALAAARERSSRFLSGLELVKQGAEARVFRGHFQGRAAVIKHRFPKGYRHP  
 ALEARLGRRTVQEARALLRCRRAGISAPVVFFVDYASNCLYMEEIEGSVTVRDYIQSTMETEKTPQGLS  
 NLAKTIGQV LARMHDEDLIHGDLTTSNMLLKPPLEQLNIVLIDFGLSFISALPEDKGVLDLVLEKAFLLST  
 HPNTETVFEAFLKSYSTSSKKARPVLKLLDEVRLRGRKRSMVG

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_033550

**ORF Size:** 759 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\\_033550.3](#), [NP\\_291028.3](#)

**RefSeq Size:** 3384 bp

**RefSeq ORF:** 762 bp

**Locus ID:** 112858

**UniProt ID:** [Q96S44](#)

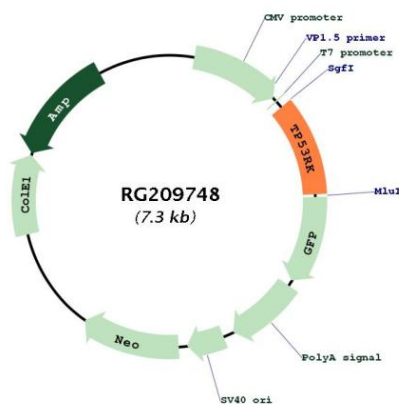
**Cytogenetics:** 20q13.12

**Domains:** S\_TKc, KOW

**Protein Families:** Druggable Genome, Protein Kinase

**Gene Summary:** Component of the EKC/KEOPS complex that is required for the formation of a threonylcarbamoyl group on adenosine at position 37 (t(6)A37) in tRNAs that read codons beginning with adenine (PubMed:22912744, PubMed:27903914). The complex is probably involved in the transfer of the threonylcarbamoyl moiety of threonylcarbamoyl-AMP (TC-AMP) to the N6 group of A37 (PubMed:22912744, PubMed:27903914). TP53RK has ATPase activity in the context of the EKC/KEOPS complex and likely plays a supporting role to the catalytic subunit OSGEP (By similarity). Atypical protein kinase that phosphorylates 'Ser-15' of p53/TP53 protein and may therefore participate in its activation (PubMed:11546806). [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RG209748