

## Product datasheet for **RG230198**

### HCK (NM\_001172132) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HCK (NM_001172132) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HCK
Synonyms:	JTK9; p59Hck; p61Hck
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG230198 representing NM\_001172132  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATGGGGTGCATGAAGTCCAAGTTCCTCCAGGTCGGAGGCAATACATTCTCAAAAACCTGAAACCAGCG  
 CCAGCCACACTGTCCTGTGTACGTGCCGATCCACATCCACCATCAAGCCGGGCCTAATAGCCACAA  
 CAGCAACACACCAGGAATCAGGGAGGCAGGCTCTGAGGACATCATCGTGGTTGCCCTGTATGATTACGAG  
 GCCATTACCACGAAGACCTCAGCTTCCAGAAGGGGACCAGATGGTGGTCTAGAGGAATCCGGGGAGT  
 GGTGGAAGGCTCGATCCCTGGCCACCCGGAAGGAGGGCTACATCCCAAGCAACTATGTCGCCCGCTTGA  
 CTCTCTGGAGACAGAGGAGTGGTTTTTCAAGGGCATCAGCCGGAAGGACGCAGAGCGCAACTGCTGGCT  
 CCCGGCAACATGCTGGGCTCCTTCATGATCCGGGATAGCGAGACCACTAAAGGAAGCTACTCTTTGTCCG  
 TCGGAGACTACGACCCTCGGCAGGGAGATACCGTCAAACATTACAAGATCCGACCCTGGACAACGGGGG  
 CTTCTACATATCCCCCGAAGCACCTTCAGCACTCTGCAGGAGCTGGTGGACCACTACAAGAAGGGGAAC  
 GACGGGCTCTGCCAGAACTGTCGGTGCCTGCATGTCTTCCAAGCCCCAGAAGCCTTGGGAGAAAGATG  
 CCTGGGAGATCCCTCGGGAATCCCTCAAGCTGGAGAAGAACTTGGAGCTGGGCAGTTTGGGGAAGTCTG  
 GATGGCCACCTACAACAAGCACCAAGGTGGCAGTGAAGACGATGAAGCCAGGGAGCATGTCGGTGGAG  
 GCCTTCTGGCAGAGGCCAACGTGATGAAAACCTGCAGCATGACAAGCTGGTCAAACCTTCATGCGGTGG  
 TCACCAAGGAGCCATCTACATCATCACGGAGTTCATGGCCAAAGGAAGCTTGTGGACTTTCTGAAAAG  
 TGATGAGGGCAGCAAGCAGCCATTGCCAAAACCTATTGACTTCTCAGCCCAGATTGCAGAAGGCATGGCC  
 TTCATCGAGCAGAGGAACATCCACCAGACCTCCGAGCTGCCAACATCTTGGTCTCTGCATCCCTGG  
 TGTGTAAGATTGCTGACTTTGGCCTGGCCGGTTCATTGAGGACAACGAGTACACGGCTCGGGAAGGGGG  
 CAAGTTCCCATCAAGTGGACAGCTCCTGAAGCCATCAACTTTGGCTCCTTACCATCAAGTCAGAGCTC  
 TGGTCTTTGGTATCCTGCTGATGGAGATCGTACCTACGGCCGGATCCCTTACCAGGGATGTCAAACC  
 CTGAAGTGATCCGAGCTCTGGAGCGTGGATACCGGATGCCTCGCCAGAGAACTGCCAGAGGAGCTCTA  
 CAACATCATGATGCGCTGCTGGAAAACCGTCCGGAGGAGCGGCCGACCTTCCAATACATCCAGAGTGTG  
 CTGGATGACTTCTACACGGCCACAGAGGCCAGTACCAACAGCAGCCA

**ACGGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG230198 representing NM\_001172132  
 Red=Cloning site Green=Tags(s)

MMGCMKSKFLQVGGNTFSKTETSASPHCPVYVPDPTSTIKPGPNSHSNTPGIREAGSEDIIVVALYDYE  
 AIHHEDLSFQKGDQMVVLEESGEWWKARSLATRKEGYIPSNYVARVDSLETEEWFVKISRKDAERQLLA  
 PGNMLGSFMIRDSETTKGSYLSVRDYDPRQGDVVKHYKIRTLDNNGFYISPRSTFSTLQELVDHYKKN  
 DGLCQKLSVPCMSKPKPWEKDAWEIPRESLKEKKGAGQFGEVWMATYNKHTKVAVKTMKPGMSVVE  
 AFLAEANVMKTLQHDKLVKLHAVVTKEPIYIITEFMAKGSLLDFLKSDEGSKQPLPKLIDFSAQIAEGMA  
 FIEQRNYIHRDLRAANILVSASLVCKIADFGLARVIEDNEYTAREGAKFPIKWTAPEAINFQSFTIKSDV  
 WSGFILLMEIVTYGRIPYPGMSNPEVIRALERGYRMPRPENCPPEELYNIMMRCWKNRPEERPTFEYIQSV  
 LDDFYTATESQYQQP

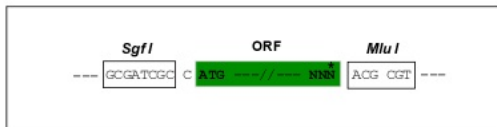
**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:

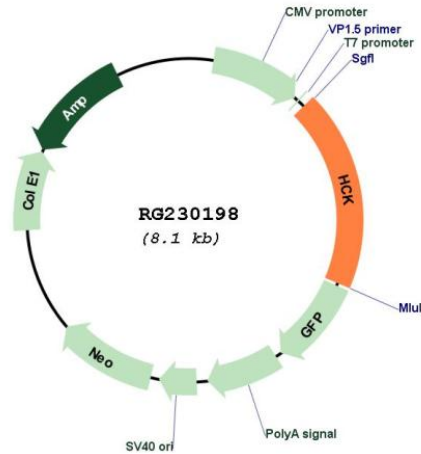


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                                     Kozac
                                     Consensus
                    EcoRI    BamHI KpnI  RBS      SgfI    AscI
CTATAGGGCGGCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

      HindIII  NheI  RsrII  MluI      NotI  XhoI      GFP Tag
CAAGCTTAACTAGCTAGCGGACCG  ACG CGT  ACG CGG  CCG CTC GAG  ATG GAG AGC GAC ---
                           T  R  T  R  P  L  E      M  E  S  D  -  -  -

          PmeI  FseI
--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGCGGAGCT
-  -  E  E  R  V  Stop
    
```

**Plasmid Map:**


**ACCN:** NM\_001172132

**ORF Size:** 1518 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\\_001172132.2](#)

**RefSeq Size:** 2234 bp

**RefSeq ORF:** 1521 bp

**Locus ID:** 3055

**Cytogenetics:** 20q11.21

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

**Protein Pathways:** Chemokine signaling pathway, Fc gamma R-mediated phagocytosis

**Gene Summary:** The protein encoded by this gene is a member of the Src family of tyrosine kinases. This protein is primarily hemopoietic, particularly in cells of the myeloid and B-lymphoid lineages. It may help couple the Fc receptor to the activation of the respiratory burst. In addition, it may play a role in neutrophil migration and in the degranulation of neutrophils. Multiple isoforms with different subcellular distributions are produced due to both alternative splicing and the use of alternative translation initiation codons, including a non-AUG (CUG) codon. [provided by RefSeq, Feb 2010]