

## Product datasheet for **RG202229**

### **HCE (RNGTT) (NM\_003800) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	HCE (RNGTT) (NM_003800) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HCE
Synonyms:	CAP1A; hCAP; HCE; HCE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG202229 representing NM\_003800  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTCACAAACAGATCCCGCCGGTGGCTGAACTGTCCCGCGCGGCCAGCCGGTGGCAGGAAGAT  
 TCTTACCTCTGAAGACAATGTTAGGACCAAGATATGATAGTCAAGTTGCTGAAGAAAATCGGTTCCATCC  
 CAGCATGCTCTCAAATTACCTAAAGAGCCTAAAGGTTAAAATGGGCTTGTGGTGGACCTGACAAATACT  
 TCAAGGTTCTATGACCGAAATGACATAGAAAAAGAAGGAATCAAATATATAAACTTCAGTGAAAGGAC  
 ATGGTGAGTGCCCTACCACTGAGAATACTGAGACCTTTATTCTGTGTGTGAGCGGTTTAAATGAAAGAAA  
 TCCACCTGAACCTATAGGTGTTTACTGTACTCATGGCTTCAATCGCACTGGTTTCTCATATGTGCCTTT  
 TTGGTGGAGAAAATGGATTGGAGTATCGAAGCAGCAGTTGCTACTTTTCCCAAGCCAGACCACCAGGAA  
 TCTACAAGGGTGATTATTTGAAGGAACTTTTTCTGTCGGTATGGTACATAGAGGAAGCACCACCCACC  
 TCTATTGCCAGATTGGTGTGGAGGATGATGAAGACGAAGATGAGGATGAGGATGGAAAGAAGGAATCA  
 GAAACCGGGTCAAGTGCTTCTTTGGCAAAGGAGAAAAGAACGGTTAAAACCTGGGCGCTATTTTCTTGG  
 AAGGTGTTACTGTAAAGGTGTAACCAAGTAACAACACAACCAAGTTAGGAGAGGTACAGCAGAAGTG  
 TCATCAATTCTGTGGCTGGGAAGGGTCTGGATTCCCTGGAGCACAGCCTGTTTCCATGGACAAGCAAAAT  
 ATTAACCTTTTAGACCTGAAGCCATACAAAGTAAGCTGGAAGCAGATGGTACTCGGTACATGATGTTGA  
 TTGATGGCACAATGAAGTTTTATGATTGATAGAGACAATTCAGTATTTTCAATCTGGAATT  
 TCCATTTTCGTAAGATCTTCGTATGCATTTATCAAATACTCTCTTGGATGGCGAGATGATTATTGACAGA  
 GTAAATGGACAGGCTGTTCCCTAGATATTTGATATATGACATAATTAATTCATTCACAGCCCGTTGGAG  
 ATTGTGATTTTAAATGTTCTGCTGAGTATAGAACGAGAAAATTATAAGTCTCGACACGAAAAAATGAA  
 GACTGGGCTCATTGACAAAACACAGGAACCATTTAGCGTCAGAAAATAAGCCGTTTTTTTGACATCTGACT  
 TCAAGAAAGCTACTTGAAGGAAATTTTCCAAAGAAGTGAGCCATGAAATGGATGGACTATTTTTCAGC  
 CTAAGGAAAATACAAACCTGGTCGATGTGATGATATTTTGAATGGAAGCCTCCAGTCTGAATTTCTGT  
 GGATTTTCTGCTAAAAATAACAAGAATGGGAGGAGAAGGGTACTTCTCAGAATGTTGGCTCCTGTAT  
 GTTGGAGGTTATGAAAGACCTTTGCACAAATCAAGGTGACAAAAGAGCTGAAACAGTATGACAACAAAA  
 TTATAGAATGCAATTTGAGAACAACAGCTGGTCTTCATGAGACAGAGAACAGACAAAAGTTTCTTAA  
 TGCCCTACAACACTGCCATGGCTGTGTAAACAGCATCTCAAACCTGTCCCAAGGAGATGCTGTTTGAG  
 TTCATCGACAGATGACTGCAGCTTCTCAAGGACAGAAGCGAAAACATCATCTGGACCCTGACACGGAGC  
 TCATGCCACCACCACCTCCAAAAGACCACCCCTTAAAC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG202229 representing NM\_003800  
 Red=Cloning site Green=Tags(s)

MAHNKIPRWLNCPRRQPVAGRFLPLKTM LGPRYDSQVAENRFHPSMLS NYLKSLKVKMGLLVDLTNT  
 SRFYDRNDIEKEGIKYIKLQCKGHGECPTTENTETFIRLCERFNERNPPELIGVHCHGHNRTGFLICAF  
 LVEKMDWSIEAAVATFAQARPPGIYKGDYKELFRRYGDIEEAPPPPLLPDWCFFEDDEDEDEDGKKES  
 ETGSSASFGKRRKERLKLGAIFLEGVTVKGVTVTTQPKLGEVQQKCHQFCGWEKSGFPGAQPVSMKQK  
 IKLLDLKPKVSWKADGTRYMMLIDGTNEVFMIDRDNVSVFVSNLEFPFRKDLRMHLSNTLLDGEMIIDR  
 VNGQAVPRYLIYDIKFN SQPVGDCDFNVRLQCIEREIISPRHEKMKTGIDKTQEPF SVRNKPFDFICT  
 SRKLLLEGNAFAKESHEMDGLIFQPTGKYKPGRCDDILKWKPPSLNSVDFRLKITRMGGELLPQNVGLLY  
 VGGYERPFQIKVTKELKQYDNKIEECKFENNSWVFMQRRTDKSFPNAYNTAMAVCNISINPVTKEMLFE  
 FIDRCTAASQGGQRKHHLDPDELMPPPPKRPHPLT

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_003800

**ORF Size:** 1791 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\\_003800.2](#), [NP\\_003791.2](#)

**RefSeq Size:** 4460 bp

**RefSeq ORF:** 1794 bp

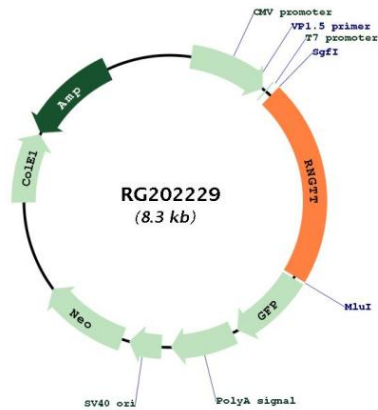
**Locus ID:** 8732

**UniProt ID:** [O60942](#)

**Cytogenetics:** 6q15

Domains:	mRNA_cap_C
Protein Families:	Druggable Genome, Phosphatase
Gene Summary:	Bifunctional mRNA-capping enzyme exhibiting RNA 5'-triphosphatase activity in the N-terminal part and mRNA guanylyltransferase activity in the C-terminal part. Catalyzes the first two steps of cap formation: by removing the gamma-phosphate from the 5'-triphosphate end of nascent mRNA to yield a diphosphate end, and by transferring the gmp moiety of GTP to the 5'-diphosphate terminus.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RG202229