

## Product datasheet for **RC201394**

### **CAP1 (NM\_006367) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CAP1 (NM_006367) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CAP1
Synonyms:	CAP; CAP1-PEN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC201394 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTGACATGCAAAATCTGGTAGAAAGATTGGAGAGGGCAGTGGGCCCTGGAGGCAGTATCTCATA  
 CCTCTGACATGCACCGTGGGTATGCAGACAGTCCCTCAAAGCAGGAGCAGCTCCATATGTGCAGGCATT  
 TGACTCGCTGCTTGTGCTCCTGTGGCAGAGTACTTGAAGATCAGTAAAGAGATTGGGGGAGACGTGCAG  
 AAACATGCGGAGATGGTCCACACAGTTTGAAGTTGGAGCGAGCTCTGTTGGTTACAGCTTCTCAGTGTC  
 AACAGCCAGCAGAAAATAAGCTTCCGATTTGTTGGCACCCATCTCAGAGCAGATCAAAGAAGTGATAAC  
 CTTTCGGGAGAAGAACCAGGCAGCAAGTTGTTTAAATCACCTGTCAGCTGTCAGCGAAAGTATCCAGGCC  
 CTGGGCTGGTGGCTATGGCTCCAAGCCTGGCCCTTATGTGAAAGAAATGAATGATGCCGCCATGTTTT  
 ATACAAACCGAGTCTCAAAGAGTACAAAGATGTGGATAAGAAGCATGTAGACTGGGTCAAAGCTTATTT  
 AAGTATATGGACAGAGCTGCAGGCTTACATTAAGGAGTCCATACCACCGGACTGGCCTGGAGCAAACG  
 GGGCCTGTGGCAAAGAAGTACGAGGACTGCCATCTGGACCCTCTGCCGGATCAGGTCTCTCCCCCTC  
 CACCAGGCCCCCTCTCCCCAGTCTCTACCAGTTCAGGCTCAGATGAGTCTGCTTCCCGCTCAGCACT  
 GTTCGCGCAGATTAATCAGGGGGAGAGCATTACACATGCCTGAAACATGTATCTGATGACATGAAGACT  
 CACAAGAACCCTGCCCTGAAGGCTCAGAGTGGTCCAGTACGCAGTGGCCCAAACCATCTCTGCACCTA  
 AACCCCAAACAGCCCATCCCCAAACGAGCCACAAGAAGGAGCCAGCTGTACTTGAAGTGGAGGGCAA  
 GAAGTGGAGAGTGGAAAATCAGGAAAATGTTTCCAACCTGGTATTGAGGACACAGAGCTGAAACAGGTG  
 GCTTACATATACAAGTGTGTCAACACGACATTGCAAATCAAGGGCAAAATTAAGTCCATTACAGTAGATA  
 ACTGTAAGAAACTTGGCCTGGTATTCGATGACGTGGTGGCATTGTGGAGATAATCAACAGTAAGGATGT  
 CAAAGTTCAGGTAATGGGTAAAGTGCCAAACCATATCCATCAACAAAACAGATGGCTGCCATGCTTACCTG  
 AGCAAGAATTCCTGGATTGTGAAATAGTCAGTGCCAAATCTTCCGAGATGAATGTCCTCATTCTACAG  
 AAGGCGGTGACTTTAATGAATCCAGTTCCTGAGCAGTCAAGACCCTATGGAACGGGCAGAAGTTGGT  
 CACCACAGTGACAGAAATTGCTGGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC201394 protein sequence  
 Red=Cloning site Green=Tags(s)

MADMQNLVERLERAVGRLEAVSHTSDMHRGYADSPKAGAAPVYQAFDSSLAGPVAEYLKISKEIGGDVQ  
 KHAEMVHTGLKLERALLVTASQCQQAENKLSDLLAPISEIQIKEVITFREKNRGSKLFNHL SAVSESIQA  
 LGWVAMAPKPGPYVKEMNDAAMFYTNRVLKEYKDVKKHVDWVKAYLSIWTELQAYIKEFHTTGLAWSKT  
 GPVAKELSGLPSGPSAGSGPPPPPPPPPPVSTSSGSDESASRSALFAQINQGESITHALKHVSDDMKT  
 HKNPALKAQSGPVRSGPKPFSAPKPQTSPPKRAKKEPAVLELEGKWRVENQENVSNLVIEDTELKQV  
 AYIYKCVNTTLQIKGKINSITVDNCKLGLVFDDVVGIVEIINSKDVKVQVMGKVPTISINKTDGCHAYL  
 SKNSLDCIEIVSAKSSEMNVLIPTTEGGDFNEFPVPEQFKTLWNGQKLVTTVTEIAG

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6153\\_e04.zip](https://cdn.origene.com/chromatograms/mk6153_e04.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_006367

**ORF Size:** 1425 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_006367.3](#)

RefSeq Size: 2798 bp

RefSeq ORF: 1428 bp

Locus ID: 10487

UniProt ID: [Q01518](#)

Cytogenetics: 1p34.2

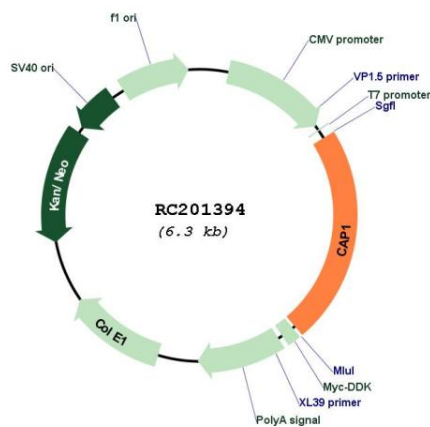
Domains: CAP, CARP

Protein Families: Druggable Genome

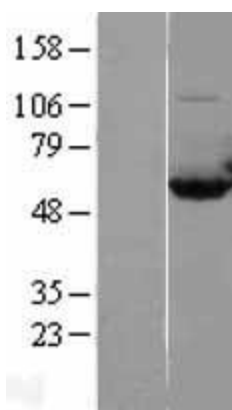
MW: 51.7 kDa

**Gene Summary:** The protein encoded by this gene is related to the *S. cerevisiae* CAP protein, which is involved in the cyclic AMP pathway. The human protein is able to interact with other molecules of the same protein, as well as with CAP2 and actin. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2016]

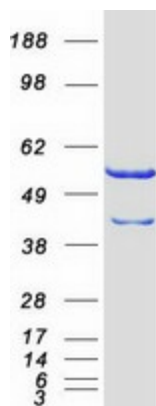
### Product images:



Circular map for RC201394



Western blot validation of overexpression lysate (Cat# [LY426252]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225806] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CAP1 protein (Cat# [TP301394]). The protein was produced from HEK293T cells transfected with CAP1 cDNA clone (Cat# RC201394) using MegaTran 2.0 (Cat# [TT210002]).