

## Product datasheet for **RC212440**

### **CENTG3 (AGAP3) (NM\_031946) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CENTG3 (AGAP3) (NM_031946) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CENTG3
Synonyms:	AGAP-3; CENTG3; cnt-g3; CRAG; MRIP-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC212440 representing NM\_031946  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAACTTCCAGGCGGGCGGGGCGAGAGCCCGCAGCAGCAGCAGAGCCTGGCGGCTCCGGGGGCGGGC  
 GCGCTGCCGCGCAGCAGCTCGTCTGCGGGCGGCGAGTTCGGCGGCGCGGGGCCCGGGGCGGGGCGGCGG  
 CGGCCCTCGCAGCAGCTGGCCGCGGGCCCCCAGCAGTTCGCGCTCTCCAATCCGCGGCCATCCGG  
 GCCGAGATCCAGCGCTTCGAGTCCGTGCATCCCAATATCTACGCCATCTACGACCTGATCGAGCGCATCG  
 AGGATTTGGCGTGCAGAACCAGATCCGGGAGCAGTCATCTCCATCGAGGACTCGTTTGTGAACAGCCA  
 GGAGTGGACGCTGAGCCGCTCCGTACCGGAGCTTAAAGTGGGCATAGTGGGAACCTGTCTAGCGGGAAG  
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 AGAAGGAGATTGGTGGATGGCCAGAGTTACCTGCTGCTGATCCGAGATGAAGGAGGCCCCCTGAGCT  
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 CGCAGGATGCCATCAGCGCTGCGAATCCCCGGTTATCGACGACAGCAGAGCCCGCAAGCTCCACAGA  
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 GTGGCCAGAAAGGTAGTGGCCTTGCAGAAAGAAGCAGCAACTGGCCATCGGGCCCTGCAAGTCACTGCCCA  
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 CTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC212440 representing NM\_031946  
 Red=Cloning site Green=Tags(s)

MNFQAGGGQSPQQQSLAAPGGGGAAAQQLVCGGQFGGAGPGAGGGGGPSQQLAGGPPQFALSNSAAIR  
 AEIQRFESVHPNIYAIYDLIERIEDLALQNQIREHVISIEDSFVNSQEWTLRSVPPELVKGVGNLSSGK  
 SALVHRYLTGTYYQEESPEGRFKKEIVVDGQSYLLLRDEGGPELQFAAWVDVAVVVFVFSLEDEISFQT  
 VYNYFLRLCSFRNASEVPMVLVGTQDAISAANPRVIDDSRARKLSTDLKRCYIETCATYGLNVERVFQD  
 VAQKVVALRKKQQLAIGPCKSLPNSPSHSAVSAASIPAVHINQATNGGSAFSDYSSVSTPSPISQREL  
 RIETIAASSTPTPIRKQSKRRSNIFTSRKGADLDREKKAEECKVDSIGSGRAIPIKQGILLKRSKSLNK  
 EWKKKYVTLCDNGLLTYHPSLDHYMQNIHGKEIDLRTTVKVPKRLPRATPATAPGTSPRANGLSVERS  
 NTQLGGGTGAPHSASSASLHSEKPLSSSAWAGPRPEGLHQRSCSVSSADQWSEATSLPPGMQHPASGPA  
 EVLSSSPKLDPPSPHSNRKHKRRKSTGTTPRDPGSSATEEAEESFEFVVVSLTGQTHFEASTAEERE  
 LWVQSVQAQILASLQGCRAKDKTRLGNQNAALAVQAVRTVRGNSFCIDCDAPNPDWASLNLGALMCIEC  
 SGIHRHLGAHL SRVRSLLDDWPELLAVMTAMGNALANSVWEGALGGYKPGPDACREEKERWIRAKYE  
 QKFLAPLPSSDVPLGQQLLRAVVEDDLRLVMLLAHGSKEEVNETYGDGDGRTALHLSSAMANVFTQL  
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 L

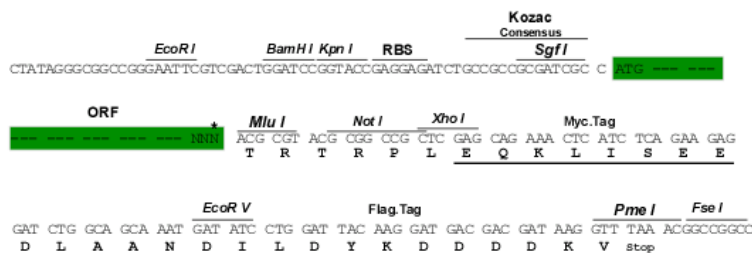
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8023\\_d12.zip](https://cdn.origene.com/chromatograms/mk8023_d12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



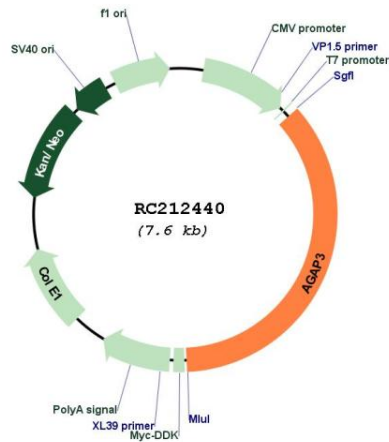
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_031946

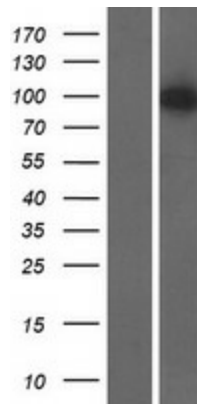
**ORF Size:** 2733 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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_031946.7</a>
<b>RefSeq Size:</b>	3247 bp
<b>RefSeq ORF:</b>	2736 bp
<b>Locus ID:</b>	116988
<b>UniProt ID:</b>	<a href="#">Q96P47</a>
<b>Cytogenetics:</b>	7q36.1
<b>Domains:</b>	ArfGap, PH, ANK, RAS, RAB
<b>MW:</b>	97.8 kDa
<b>Gene Summary:</b>	This gene encodes an essential component of the N-methyl-D-aspartate (NMDA) receptor signaling complex which mediates long-term potentiation in synapses by linking activation of NMDA receptor to alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptor trafficking. The encoded protein contains an N-terminal GTPase-like domain, a pleckstrin homology domain, an ArfGAP domain and several C-terminal ankryn repeat domains. [provided by RefSeq, Apr 2017]

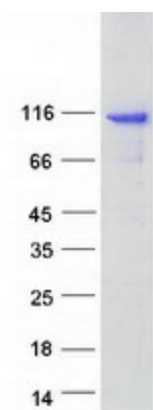
Product images:



Circular map for RC212440



Western blot validation of overexpression lysate (Cat# [LY410429]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212440 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AGAP3 protein (Cat# [TP312440]). The protein was produced from HEK293T cells transfected with AGAP3 cDNA clone (Cat# RC212440) using MegaTran 2.0 (Cat# [TT210002]).