

Product datasheet for **RG218282**

ch TOG (CKAP5) (NM_001008938) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ch TOG (CKAP5) (NM_001008938) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CKAP5
Synonyms:	ch-TOG; CHTOG; MSPS; TOG; TOGp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218282 representing NM_001008938 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

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AAAGAATGTTTCAGAAAAGGTAGAACTGATACATGGTAAGAAAGCTGGACTAGCTGCTGATAAGAAGGAAT
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 CGCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG218282 representing NM_001008938
 Red=Cloning site Green=Tags(s)

MGDDSEWLKLPVDQKCEHLWKARLSGYEEALKIFQKIKDEKSPESKFLGLIKKFVTDNSAVVQLKGLE
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 IVACIETLRKALSEFGSKIILLKPIIKVLPKLFESREKAVRDEAKLIAVEIYRWIRDALRPPLQININSVQ
 LKELEEEVWLKPTSAAPRTRFLRSQQELEAKLEQQQSAGGDAEGGGDDGDEVPQIDAYELLEAVEILSKL
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 EGTKSKNSKQRAECLLEELGCLVESYGMNVCQPTPGKALKEIAVHIGDRDNVRAALNTIVTVYNVHGDQ
 VFKLIGNLSEKDSMSEERIKRS AKRPSAAPIKQVEEKQRAQNISSNANMLRKGAEDMSSKLNQARSM
 SGHPEAAQMVRREFQLDLDEIENDNGTVRCEMPELVQHKLDDIFEPVLIPEPKIRAVSPHFDDMHSNTAS
 TINFIISQVASGDINTSIQAL TQIDEVLRQEDKAEAMSGHIDQFLIATFMQLRLIYNTHMADEKLEKDEI
 IKLYSCIIGNMISLFIQIESLAREASTGVLKDLMHGLITLMLDSRIEDLEEGQQVIRSVNLLVVKLEKSD
 QTNILSALLVLLQDSSLATASSPKFSELVMKCLWRMVRLLPDTINSINLDRILLDIHIFMKVFPKEKLLKQ
 CKSEFPIRTLLKTLHTLCKLKGPKILDHLLTMIDNKNSELEAHLCRMKHSMDQTGSKSDKETEGASRI
 DEKSSKAKVNDFLAEIFKKIGSKENTKEGLAELEYKPKYSDADIEPFLKNSSQFFQSYVERGLRVIEME
 REGKGRISTSTGISPQMEVTCVPTPTSTVSSIGNTNGEEVGPSVYLERLKI LRQRCLDNTKQDDRPPLT
 SLLSKPAVPTVASSTMLHLSKLSQLRESREQHHSQDLSNQTHSSGTVTSSSSTANIDDLKKRLERIKSS
 RK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

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 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_001008938.4](#)

RefSeq Size: 6714 bp

RefSeq ORF: 6099 bp

Locus ID: 9793

UniProt ID: [Q14008](#)

Cytogenetics: 11p11.2

Protein Families: Druggable Genome

Gene Summary:

This gene encodes a cytoskeleton-associated protein which belongs to the TOG/XMAP215 family. The N-terminal half of this protein contains a microtubule-binding domain and the C-terminal half contains a KXGS motif for binding tubulin dimers. This protein has two distinct roles in spindle formation; it protects kinetochore microtubules from depolymerization and plays an essential role in centrosomal microtubule assembly. This protein may be necessary for the proper interaction of microtubules with the cell cortex for directional cell movement. It also plays a role in translation of the myelin basic protein (MBP) mRNA by interacting with heterogeneous nuclear ribonucleoprotein (hnRNP) A2, which associates with MBP. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2011]