

Product datasheet for **RG221071**

ch TOG (CKAP5) (NM_014756) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ch TOG (CKAP5) (NM_014756) 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:	>RG221071 representing NM_014756 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGAGATGACAGTGAGTGGTTGAACTGCCAGTTGATCAGAAATGTGAACACAAGCTGTGAAAGCAA
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 AAAAAAGACTGGAGAGAATAAAGAGCAGTCGCAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG221071 representing NM_014756
 Red=Cloning site Green=Tags(s)

MGDDSEWLKLPVDQKCEHLWKARLSGYEEALKIFQKIKDEKSPESKFLGLIKKFVTDNAVVLKGLG
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 IVACIETLRKALSEFGSKIILLKPIIKVLPKLFESREKAVRDEAKLIAVEIYRWIRDALRPPLQINISVQ
 LKLEEEEWYKLPSTAPRPTFLRSQQELEAKLEQQQSAGGDAEGGDDGDEVPQIDAYELLEAVEILSKL
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 AAPGGAGNTGTNKKGLETKEIVEPELSIEVCEEKASAVLPPTCQLLDSNWKERLACMEEFQKAVELM
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 EGTKSKNSKQRAECLLEELGCLVESYGMNVCQPTPGKALKEIAVHIGDRDNVRAALNTIVTVYVNHGDQ
 VFKLIGNLSEKDMSMLEERIKRSARPSAAPIKQVEEKQRAQNISSNANMLRKGAEDMSSKLNQARSM
 SGHPEAAQMVRRREFQLDLDEIENDNGTVRCPEMPELVQHKLDDIFEPVLIPEPKIRAVSPHFDDMHSNTAS
 TINFIISQVASGDINTSIQALTQLFQIESLAREASTGVLKDLMHGLITLMLDSRIEDLEEGQQVIRSVNL
 LVVKVLEKSDQTNILSALLVLLQDSSLATASSPKFSELVMKCLWRMVRLPDTINSINLDRILLDIHIFM
 KVFPKEKLGCKSEFPITLKTLLHTLCKLKGPKILDHLTMIDNKNESELEAHLCRMKHSMDQTGSKSD
 KETEKGASRIDEKSSKAKVNDFLAEIFKKIGSKENTKEGLAELYEYKKKYSADIEPFLKNSSQFFQSYV
 ERGLRVIEMEREGKGRISTSTGISPQMEVTCVPTPTSTVSSIGNTNGEEVGPVSVYLERLILRQRCGLDN
 TKQDDRPLTSLLSKPAVPTVASSTDMLSKLSQLRESREQHQSDDLSDSNQTHSSGTVTSSSSTANIDDL
 KKRLERIKSSRK

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

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:	<ol style="list-style-type: none">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:	<u>NM_014756.3</u> , <u>NP_055571.2</u>
RefSeq Size:	6550 bp
RefSeq ORF:	5919 bp
Locus ID:	9793
UniProt ID:	<u>Q14008</u>
Cytogenetics:	11p11.2
Protein Families:	Druggable Genome
Gene Summary:	<p>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]</p>