

Product datasheet for **RG205742**

MKKS (NM_170784) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	MKKS
Synonyms:	BBS6; HMCS; KMS; MKS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG205742 representing NM_170784
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTCTCGTTTGAAGCTAAGAAGCCATCATTGTGTAAGAGTGAACCACTGACAACAGAGAGTCAGGA
 CCACACTTTCTGTCTTGAAGAATTGTAACATCATGCTATGGCCCTTCAGGTAGGCTGAAGCAGCTGCA
 CAATGGCTTTGGAGGTTACGTGTGTACAACCTCACAGTCCTCAGCTCTGCTCAGTCACCTTTTGGTCACA
 CATCCCATTTTAAGATCCTGACAGCCTCCATACAGAATCATGTGTCAAGCTTCAGTGATTGTGGCTTAT
 TCACAGCTATTCTTTGCTGCAACCTGATTGAAAATGTTGAGAGATTAGGCTTGACACCCACCACTGTCAT
 TAGATTAAATAAACATCTTTTGTGCTTTGTCATCAGTTATCTCAAGTCTGAGACCTGTGGTTGTCGAATC
 CCAGTGGACTTTAGTAGTACTCAGATCCTCCTTTGTTGGTGCCTAGTATATTAACAAGTAAACCTGCCT
 GTATGCTCACCAGAAAGGAAACAGAGCATGTCAGTGCTTTGATTCTGAGAGCCTTTTGTCTACAATTCC
 AGAAAAATGCTGAAGGCCACATCATTTTAGGAAAGAGTTTAATTGTACCTTTAAAGGTCAAAGAGTTATA
 GATTCCACTGTATTACCTGGGATACTCATTGAAATGTCAGAAGTTCAATTAATGAGGCTATTACCTATCA
 AAAAACTCAACTGCCTCAAGGTGGCACTCTTTGTACAACCTTATCCGGAGACACTTCTGACACTGGAGA
 AGGAACTGTGGTGGTCACTTATGGGGTTTCTCTGAAAATGCAGTCTTGACCAGCTGCTTAACCTAGGA
 AGGCAGCTAATCAGTGACCAGTAGATCTTGCTGTGCCAAAAAGTTATACATCCATCTTTGAAGCAGT
 TTCTCAATATGCATCGTATTATTGCCATAGACAGAATTGGAGTGACTCTGATGGAACCCCTGACTAAAAAT
 GACAGGAACACAGCCTATTGGATCCCTAGGCTCAATATGTCCTAATAGTTATGGAAGTGTGAAAGATGTG
 TGCAGTCAAAAAATTTGGCTCCAACATTTTTTTCATCTTATTCCTAATGAAGCAACAATCTGCAGCTTGC
 TTCTCTGCAACAGAAATGACACTGCCTGGGATGAGCTGAAGCTCACGTGTCAGACGGCACTGCATGCTCT
 GCAGTTAACTCAAGGAACCATGGGCTTTGTTGGGAGGTGGCTGTACTGAAACTCATTGGCTGCATAT
 ATCAGACACAAGACTCACAACGACCAGAAAGCATTCTCAAAGATGATGAATGTAACAAACAGAACTTC
 AATTAATTGCTGAAGCATTTTGCAGTGCCCTAGAATCTGTTGTTGGCTCTTTAGAACATGATGGAGGTGA
 AATTCTCACTGACATGAAGTATGGACACCTTTGGTCAGTTCAGGCAGATTCTCCCTGTGTTGCTAACTGG
 CCAGATTTGCTTTACAGTGTGGCTGTGGATTATACAATAGCCAGGAAGAACTCAACTGGTCTTTCTTAA
 GAAGCACATGTCGTCATTTGTGCCACAAAGCTGCCTTCCACATGAAGCTGTGGTCTCAGCCAGCAACCT
 GACCTTGGACTGTTTACTGCAAGCTTAGTGGCTACAGGTGGCTGTAGAGACAGCCAATTTGATTTTG
 GATCTTTCATATGTTATTGAAGATAAAAAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG205742 representing NM_170784
 Red=Cloning site Green=Tags(s)

MSRLEAKKPSLCKSEPLTTERVRTLSVLKRIVTSCYGPSGRLKQLHNGFGGYVCTTSQSSALLSHLLVT
 HPILKILTASIQNHVSSFSDCGLFTAILCCNL IENVQRLGLTPTTVIRLNKHL LSLCISYLKSETCGCRI
 PVDFFSTQILLCLVRSILTSKPACMLTRKETEHVSALILRAFLLTIPENAEHII LKSLIVPLKGQIRVI
 DSTVLPGIL IEMSEVQLMRLLPIKKSTALKVALFCTTSGDTSDTGEGTVVVSYGVSLENAVLDQLNLG
 RQLISDHVDLVLCQKVIHPSLKQFLNMHRIIAIDRIGVTLMEPLTKMTGTQPIGSLGSI CPNSYGSVKDV
 CTAKFGSKHFFHLIPNEATICSLLL CNRNDTAWDELKLTCTALHVLQLTLKEPWALLGGGCTETHLAAY
 IRHKTHNDPESILKDDECTQTELQIAEAFCSALESVVGSLEHDGGEILTDMKYGHLWSVQADSPCVANW
 PDLLSQCGCGLYNSQEELNWSFLRSTCRPFVPQSCLPHEAVVSASNL TLDCLTAKLSGLQVAVETANLIL
 DLSYVIEDKN

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_170784

ORF Size: 1710 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

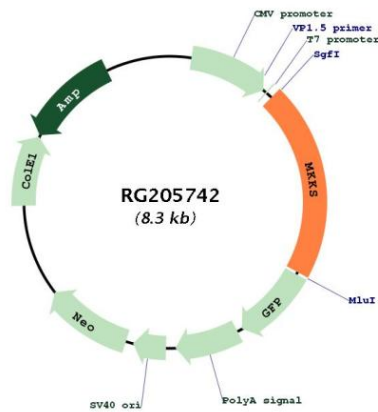
RefSeq: [NM_170784.1](#), [NP_740754.1](#)

RefSeq Size: 2540 bp

RefSeq ORF: 1713 bp
Locus ID: 8195
UniProt ID: [Q9NPJ1](#)
Cytogenetics: 20p12.2

Gene Summary: This gene encodes a protein which shares sequence similarity with other members of the type II chaperonin family. The encoded protein is a centrosome-shuttling protein and plays an important role in cytokinesis. This protein also interacts with other type II chaperonin members to form a complex known as the BBSome, which involves ciliary membrane biogenesis. This protein is encoded by a downstream open reading frame (dORF). Several upstream open reading frames (uORFs) have been identified, which repress the translation of the dORF, and two of which can encode small mitochondrial membrane proteins. Mutations in this gene have been observed in patients with Bardet-Biedl syndrome type 6, also known as McKusick-Kaufman syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2013]

Product images:



Circular map for RG205742