OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC124427

MKKS (NM_170784) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MKKS (NM_170784) Human Untagged Clone
Tag:	Tag Free
Symbol:	MKKS
Synonyms:	BBS6; HMCS; KMS; MKS
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC124427 sequence for NM_170784 edited (data generated by NextGen Sequencing)

ATGTCTCGTTTGGAAGCTAAGAAGCCATCATTGTGTAAGAGTGAACCACTGACAACTGAG
AGAGTCAGGACCACACTTTCTGTCTTGAAAAGAATTGTAACATCATGCTATGGCCCCTCA
GGTAGGCTGAAGCAGCTGCACAATGGCTTTGGAGGTTACGTGTGTACAACCTCACAGTCC
TCAGCTCTGCTCAGTCACCTTTTGGTCACACATCCCATTTTAAAGATCCTGACAGCCTCC
ATACAGAATCATGTGTCAAGCTTCAGTGATTGTGGCTTATTCACAGCTATTCTTTGCTGC
AACCTGATTGAAAATGTTCAGAGATTAGGCTTGACACCCACCACTGTCATTAGATTAAAT
AAACATCTTTTGAGTCTTTGCATCAGTTATCTCAAGTCTGAGACCTGTGGTTGTCGAATC
CCAGTGGACTTTAGTAGTACTCAGATCCTCCTTTGTTTGGTGCGTAGTATATTAACAAGT
AAACCTGCCTGTATGCTCACCAGAAAGGAAACAGAGCATGTCAGTGCTTTGATCCTGAGA
GCCTTTTTGCTTACAATTCCAGAAAATGCTGAAGGCCACATCATTTTAGGAAAGAGTTTA
ATTGTACCTTTAAAAGGTCAAAGAGTTATAGATTCCACTGTATTACCTGGGATACTCATT
GAAATGTCAGAAGTTCAATTAATGAGGCTATTACCTATCAAAAAATCAACTGCCCTCAAG
GTGGCACTCTTTTGTACAACTTTATCCGGAGACACTTCTGACACTGGAGAAGGAACTGTG
GTGGTCAGTTATGGGGTTTCTCTTGAAAATGCAGTCTTGGACCAGCTGCTTAACCTAGGA
AGGCAGCTAATCAGTGACCACGTAGATCTTGTCCTGTGCCAAAAAGTTATACATCCATCT
TTGAAGCAGTTTCTCAATATGCATCGTATTATTGCCATAGACAGAATTGGAGTGACTCTG
ATGGAACCCCTGACTAAAATGACAGGAACACAGCCTATTGGATCCCTAGGCTCAATATGT
CCTAATAGTTATGGAAGTGTGAAAGATGTGTGCACTGCAAAATTTGGCTCCAAACATTTT
TTTCATCTTATTCCTAATGAAGCAACAATCTGCAGCTTGCTTCTCTGCAACAGAAATGAC
ACTGCCTGGGATGAGCTGAAGCTCACGTGTCAGACGGCACTGCATGTCCTGCAGTTAACA
CTCAAGGAACCATGGGCTTTGTTGGGAGGTGGCTGTACTGAAACTCATTTGGCTGCATAT
ATCAGACACAAGACTCACAACGACCCAGAAAGCATTCTCAAAGATGATGAATGTACTCAA
ACAGAACTTCAATTAATTGCTGAAGCATTTTGCAGTGCCCTAGAATCTGTTGTTGGCTCT
TTAGAACATGATGGAGGTGAAATTCTCACTGACATGAAGTATGGACACCTTTGGTCAGTT
CAGGCAGATTCTCCCTGTGTTGCTAACTGGCCAGATTTGCTTTCACAGTGTGGCTGTGGA
TTATACAATAGCCAGGAAGAACTCAACTGGTCTTTCTTAAGAAGCACACGTCGTCCATTT
GTGCCACAAAGCTGCCTTCCACATGAAGCTGTGGGCTCAGCCAGCAACCTGACCTTGGAC
TGTTTGACTGCAAAGCTTAGTGGCCTACAGGTGGCTGTAGAGACAGCCAATTTGATTTTG
GATCTTTCATATGTTATTGAAGATAAAAACTAA

Clone variation with respect to NM_170784.1

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_170784 unedited
TACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCCCTTTAGTTGGGCTCATACA
TTTGGGGTGGTACAGAATCAAAAGCAGCCCTGTTTTCCAAATACCTAAAAACGACGACAT
TCCTGAGCAAGATAGTCTGGGACTTTCAAATCTTCAGAAGAGCCAAATCCAGGGGAAGTA
GCAGGCTTGCAATCTTCAGGTAAAGAAGCAGCTTTGAATCTGAGCTTCATATCGAAAGAA
GAGATGAAAAATACCAGTTGGATTAGAAAGAACTGGCTTCTTGTAGCTGGGATATCTTTC
ATAGGTGTCCATCTTGGAACATACTTTTTGCAGAGGTCTGCAAAGCAGTCTGTAAAATTT
CAGTCTCAAAGCAAACAAAAGAGTATTGAAGAGTGAAGTAAAATAAATATTTGGAATTAC
TAATTTGTCATTAAATCATTCTATGCTGATTAGCTTCATAAACATTGAACTTTTTGATTT
TATAGCCACAATGCTGCATATTCATACTTTAATTCCTAAAGAATAATTTTTAATGTTAAA
ACGTGATAATGCAATAAATAGAAAAATGTGGTTTACAAAATAAAAACGGTCTTCACTAGT
TACCACCTGAAGTAAGATGTCTCGTTTGGAAGCTAAGAAGCCATCATTGTGTAAGAGTGA
ACCACTGACAACTGAGAGAGTCAGGACCACACTTTCTGTCTTGAAAGAATTGTACATCAT
GCTATGGCCCCCTCAGTANGCTGAAGCAGCTGCACAATGGCTNTGGAGGNTACGTGTGTA
CAACCTCACAGTCCTCAGCTCTGCTCAGTCACCTTTTGGTCACACATCCCATTNTAAGAT
CCTGACAGCCTNCTACAGATNATGTGTCAAGCTCAGTGATGTGGCTTATTACAGCTATTC
TTGCTGCAACTGATGAAAATGTANNAGATAGCTTGCACCCACACTGTCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_170784 unedited
GCATGGCGCAGGGTCACAGGGATGCCACTCTGGGATCTGTTCAGGNAAACAGCTATGACC
GCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTCANTTGCCAACAGACTAGTT
TATTTGTTTCTCTTTTTTTNCGANCNTGCTATTCTCTTAGTTTAAAAAAAAAAAAAAATT
NGGGTGGNNCTTCCGCGCTTTTGATTTTTTTTAGAGAAAAAAAAATTTTTTTTTTCCCNG
CCGCCTTTTTTTTTGGGGGGGGTTGTTTCCCCCCCCCCGGGGCCCCCCCCCCCCCGCGGC
CGCCCCCCCCCCCCCCCCGCGGTGCGCCGGCGCCCCGGGCTCCCCCCCCCCCCGCCCCCG
CCCGTTCGCCGCCTCGCCCCCGCCCCCCGCCCGCCGCCGCGCCCCGCCCCCCGGCCCCCC
CCGTCCCCCCGCCCCCCCTGGGCCTCCCTGTCCTTTCTCGCCGTCGCCGCGGTCCGCCTC
CCCCTTGCCCCCCCCCCCCCCGCCCGCGCGCCCCGGCCCGCCGCCCCCGCGGCCCCGCGC
GGTCGTCCGCCCGCCCTGCCCCCCCCCCGCCCCCCCCCCCCCGCCCTTCCCGCCGCGCGGG
CCGTCGCCGCGGTGGTGCCCCGCGCCCCCCGCTCCGCTCCCCCGCGCCCGCCCCCCCCCC
TCGCCCCGCGCCCCCCCCCCGCCCGCGCCGCCGCCCGGTCTCCGCCCCCCCCCCCTGCCC
CCCTGCCGGGTCCTCCCCCCCGCGTCCCGTGCGCTTTTCCCCCCGCGCTCCCTTGTGCGT
CCGCCCCCCGCCGCCGGCGCCACACACCGAAAAAAAACCCCCCACCTCGCA

Restriction Sites: NotI-NotI

ACCN: NM_170784

Insert Size: 2300 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_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]
Transcript Variant: This variant (2) differs in the 5' UTR, compared to variant 1. Variants 1 and 2 encode the same protein.