

Product datasheet for **RG228443**

MKS1 (NM_001165927) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	MKS1
Synonyms:	BBS13; JBTS28; MES; MKS; POC12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG228443 representing NM_001165927
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCTGTGCCAGTTTCCTCATTTGCACAGCGCACGAGGTCCCGCTTCGAGTCCACCTGCAAAGAATCA
 CATCAAGCAACTTTCTTATTATCAGCCTGCTGCCGAGCTCGGGAAGGACCTCATAGACTTGCCCACTTT
 TAGGCCTCAGCCTGAGTGGACACCGCCAGAGGAAGACGAAGAGGAGGAGATTGTGATTGGGTGG
 CAGGAGAAGCTCTTTAGCCAGTTTGAAGTAGATCTGTACCAAAATGAAACAGCCTGTGAGTCTTTTG
 ATTATCAGTACCGTCAGGAGATCTGAAGCTGGAGAATTCGGGTGGCAAGAAAAACCGACGAATCTTTAC
 CTACACTGACTCTGATAGATACACCAATTTGGAGGAGCACTGTGAGAGAATGACCACTGCAGCCAGCGAG
 GTGCCTTCATTCTTGGTCGAGCGAATGGCAATGTGAGGCGTCGCCGGCAGGACAGGCGAGGGATGGAGG
 GCGGCATCCTCAAGTCACGCATCGTCACCTGGGAGCCCTCAGAAGAGTTTGTGAGGAACAACACGTCAT
 TAACACCCCTCTTCAGACAATGCACATCATGGCAGACCTGGGGCCCTATAAAAGCTTGGCTATAAGAAG
 TATGAACATGTCCTGTGTACTCTGAAGGTGGATAGCAATGGTGTGATCACAGTAAAGCCTGACTTCACGG
 GCCTCAAAGGACCTACAGGATTGAGACGGAGGGGAGAAGCAGGAGCTGTGGAATATACGATCGACAA
 TGTTTCCCCCACGCACAGCCGGAGGAGGAGGAGCGGGAACGGCGAGTGTTCAAGGATCTTTATGGCCGG
 CACAAGGAGTATCTCAGCAGCTCGTAGGCACCGACTTTGAGATGACTGTCCAGGTGCCCTCCGGCTCT
 TTGTAATGGAGAGGTGCTTTAGCCCAAGGCTATGAGTATGACAATCTCTACGTCCACTTCTTTGTAGA
 ATTGCCAACTGCTCACTGGTCAAGCCAGCATTCCAGCAGCTCTCAGGAGTAACACAGACCTGCACCACC
 AAGTCCCTGGCAATGGACAAGGTGGCTCACTTCTCTACCCATTACGTTTGAAGCCTTCTTCTCCATG
 AGGATGAATCTTCTGATGCACTCCCGAGTGGCTGTGCTCTACTGTGAGGTCTCTCGTGGACTTCTG
 GCAGAGGTACCGTGTGGAAGGCTATGGGGCTGTGGTGTGCTGCCACTCCAGGCTCACACACCCTGACA
 GTCTCCACGTGGAGACCTGTGGAGCTTGGCACGGTGGCTGAGTGAAGGAGTTTTCATTGGCGGTTCTC
 TGGAAGTGGAGGACCTCTCTATGTACGGATACAGGATCCTTCAAGGGGGAACGCCTGAGCCGCTTTGG
 ACTCCGCACAGAGACCACAGGCACTGTACCTTCCGCTTGCAGTGTCTGCAGCAGTCCAGGGCCTTCATG
 GAATCGAGTCCCTTCAGAAAAGGATGCGGAGTGTGTTGGACCGTCTGGAAGGGTTACGCCAGCAGAGTT
 CCATTACAATGTGCTAGAGGCTTCCGTCGAGCCGCGCGCATGCAGGAGGCCCGGAAAGCCTCCC
 GCAGGACCTAGTGAGCCCTCTGGAACCTGGTCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

Protein Sequence: >RG228443 representing NM_001165927
 Red=Cloning site Green=Tags(s)

MAVPVSSFAQRTRSFRVHLQRITSSNFLHYQPAELGKDLIDLATFRPQPTASGHRPEDEEEEIVIGW
 QEKLFSQFEVDLYQNETACQSPLDYQYRQEILKLENSGGKKNRIFTYTDSDRYTNLEEHQRMTTAASE
 VPSFLVERMANVRRRQDRRGMEGILKSRIVTWEPSEEFVRNNHVINTPLQTMHIMADLGPYKKLGYYK
 YEHVLCTLKVDNNGVITVKPDFGLKGPYRIETEGEKQELWKYITDNVSPHAQPEEEERERRVFKDLYGR
 HKEYLSSLVGTDFTFEMTVPGALRLFVNGEVVSAQGYEYDNLVYHFFVELPTAHWSSPAFQQLSGVTQTCTT
 KSLAMDKVAHFSYPFTFEAFFLHEDESSDALPEWPVLYCEVLSLDFWQRYRVEGYGAVVLPATPGSHTLT
 VSTWRPVELGTVAELRRFFIGGSLELEDLSYVRIPGSFKGERLSRFGRLTETTGTVTFRHLCLQQSRAFM
 ESSSLQKMRMSVLDRLGFSQQSSIHNVLFAFRARRRRMQEARESLPQDLVSPSGTLVS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001165927

ORF Size: 1647 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_001165927.1](#), [NP_001159399.1](#)

RefSeq Size: 2397 bp

RefSeq ORF: 1650 bp

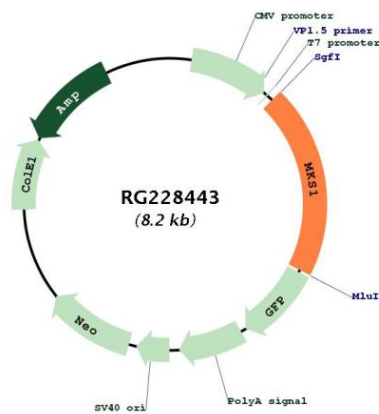
Locus ID: 54903

UniProt ID: [Q9NXB0](#)

Cytogenetics: 17q22

Gene Summary: The protein encoded by this gene localizes to the basal body and is required for formation of the primary cilium in ciliated epithelial cells. Mutations in this gene result in Meckel syndrome type 1 and in Bardet-Biedl syndrome type 13. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2009]

Product images:



Circular map for RG228443