

Product datasheet for **SC318349**

MIOS (NM_019005) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	MIOS
Synonyms:	MIO; Sea4; Yulink
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



Fully Sequenced ORF:

>SC318349 representing NM_019005.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAGCGGTACCAAACCTGATATTTATGGGCACCACCATGTTGATAGATTGTTGTGTGTGACTCA
GAACTAAGTCTTTATCATGTGGAATCTACTGTGAATTCAGAACTCAAAGCTGGATCTTACGTTTATCT
GAAGACTCTGCAGCTACATTACTGTCAATAAATTCAGATACACCCTATATGAAATGTGTTGCCTGGTAT
CTTAATTATGATCCTGAATGTCTGCTGGCAGTTGGACAAGCAAAATGGTCGAGTTGTACTTACAAGCCTT
GGTCAAGATCATAACTCAAAGTTCAAAGATTGATAGGAAAAGAGTTTGTCCAAAACATGCACGACAA
TGTAATACCCCTTGCCTGGAATCCACTGGATAGTAACTGGCTAGCTGCTGGTTAGATAAGCACAGAGCT
GACTTTTCAGTGCTAATATGGGATATCTGCAGCAAAATATACTCCTGATATAGTTCCCATGGAAAAAGTG
AAACTTTTCAGCAGGTGAACTGAAACAACATTATTAGTAACAAAACCACTTTATGAGTTAGGACAGAAT
GATGCTTGTCTGTCTTTTGTGGCTTCCACGAGACCAGAACTTCTCCTTGTGGTATGCATCGTAAC
CTAGCTATATTTGATCTTCGGAATACAAGCCAAAAGATGTTCTGTAATACAAAAGCTGTTACGGGTGTG
ACGGTAGACCCATATTTCCACGATCGTGTGCTTCTCTATGAAGGTCAGGTTGCAATATGGGATCTT
AGAAAAATTTGAGAAGCCAGTTTGGACATTGACTGAGCAACCAAAACCCCTTAACAAAAGTAGCATGGTGT
CCCCTAGGACTGGTCTACTTGCCACTTTAACAAGGGATAGTAATATTATTAGATTGTATGATATGCAG
CATACACCCACTCCCATTTGGGGATGAACTGAACCCACAATAATTGAAAGAAGTGCAACCTTGTGAC
AATTACATTGCTTCTTTGCGTGCCATCCAACAAGTCAAAATCGAATGATAGTTGTAACCTCCCAACCGA
ACAATGTCAGACTTCACTGTTTTTGAAGGATATCTCTTGCCTGGAGCCCAATTACATCTTTAATGTGG
GCTTGTGGTCGTCATTTATAGAAATGTACGGAAGAAGAAATGATAATTCTTTAGAAAAAGATATAGCA
ACGAAGATGCGTCTTCGGGCTTTATCAAGGTATGGACTTGATACAGAGCAGGTGTGGAGGAACCACTT
TTAGCTGGAATGAAGATCCACAGCTCAAGTCACTCTGGTATACTCTGCACTTTATGAAGCAATACACA
GAAGATATGGATCAGAAATCTCCAGGCAACAAAGGATCATTGGTTTATGCAGGAATTAATCAATTGTA
AAGTCATCGTTGGGAATGGTGGAAAGCAGCAGACATAATTGGAGTGGGTGGATAAGCAAAGTGATATT
CAAAATTTAAATGAAGAGAGAACTTAGCTTTACAGCTTTGTGGGTGGATAAAGAAAGGAACGGATGTA
GACGTGGGGCCATTTTGAATCCCCTTGTACAAGAAGGGGAATGGGAAAGAGCTGCTGCTGTGGCATTG
TTCAACTTGGATATTCGCCGAGCAATCCAATCCTGAATGAAGGGGCATCTTCTGAAAAAGGAGACTCG
AATCTCAATGTGGTAGCAATGGCTTTATCGGGTTATACGGATGAGAAGAACTCCCTTGGAGAGAAATG
TGTCAGCACTGCGATTACAGCTAAATAACCCGATTTTGTGTGTCATGTTGCATTTCTGACAAGTGAA
ACAGGATCTTACGATGGAGTTTGTATGAAAACAAAGTTGCAGTACGTGACAGAGTGGCATTGTGCTGT
AAATTCCTTAGTGATACTCAGTTAAATAGATACATCGAAAAGTTGACCAATGAAATGAAAGAGGCTGGA
AATTTGGAAGGAATTTTGTCTACAGGCCTTACTAAAGATGGAGTGGACTTAATGGAGAGTTATGTTGAT
AGAAGTGGAGATGTTCAAACAGCAAGTTACTGTATGTTACAGGGTTCACCTTTAGATGTTCTTAAAGAT
GAAAGGGTTTCAGTACTGGATTGAGAATTATAGAAATTTATTAGATGCCTGGAGGTTTTTGGCATAAACGA
GCTGAATTTGATATTACAGGAGTAAGTTGGATCCAGTTCGAAGCCTTTAGCACAAGTTTTTGTGAGT
TGCAATTTCTGTGGCAAGTCAATCTCTACAGCTGTTACAGCTGTGCCTCATCAGGCGAGAGGTTTTAGT
CAGTATGGTGTGAGTGGCTACCAACGAAATCTAAAGTCACAAGTTGTCTGGCTGTGAAAACCACTT
CCTCGATGTGCGCTTTGTCTAATATGGGAACACCAAGTTTCTAGCTGTCTGGAGGAACCAATCA
GATGAAAAAGTGGACTTGAGCAAGGACAAAAAATTAGCCCAATTTAACAACCTGGTTTACATGGTGTGAT
AATTGCAGGCACGGTGGACATGCTGGACATATGCTTAGTTGGTTCAGGGACCATGCAGAGTGCCCTGTG
TCGGCATGCACGTGTAATGTATGCAGTTGGATACAACAGGGAATCTGGTACCTGCAGAGACTGTCCAG
CCATAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:

SgfI-MluI

ACCN:

NM_019005

Insert Size:

2628 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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_019005.3
RefSeq Size:	3340 bp
RefSeq ORF:	2628 bp
Locus ID:	54468
UniProt ID:	Q9NXC5
Cytogenetics:	7p21.3
Domains:	WD40
MW:	98.6 kDa
Gene Summary:	As a component of the GATOR subcomplex GATOR2, functions within the amino acid-sensing branch of the TORC1 signaling pathway. Indirectly activates mTORC1 and the TORC1 signaling pathway through the inhibition of the GATOR1 subcomplex (PubMed:23723238). It is negatively regulated by the upstream amino acid sensors SESN2 and CASTOR1 (PubMed:25457612, PubMed:27487210).[UniProtKB/Swiss-Prot Function]