

## Product datasheet for **RC207192**

### **FIG4 (NM\_014845) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FIG4 (NM_014845) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FIG4
Synonyms:	ALS11; BTOP; CMT4J; dj249I4.1; KIAA0274; SAC3; YVS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC207192 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCCACGGCCGCCGCCCATCATCAGCTCGGTCCAGAAGCTGTTCTGTATGAGACTAGAGCTAGAT  
ACTTTCTAGTTGGGAGCAATAATGCAGAAACGAAATATCGTGTCTTGAAGATTGATAGAACAGAACCAAA  
AGATTTGGTCATAATTGATGACAGGCATGTCTATACTCAACAAGAAGTAAGGGAACCTTCTGGCCGCTTG  
GATCTTGAAATAGAACAAAGATGGGACAGAAAGGATCCTCGGGCTTATTTGAGCGGTTTCAGCTTTTG  
GTGTTGTGGGTTTTGTCAGGTTCTTAGAAGGCTATTATATTGTGTTAATAACTAAAAGGAGGAAGATGGC  
GGATATTGGAGGTCATGCAATCTATAAGGTCGAAGATACAATATGATCTATATACCCAATGATTCTGTA  
CGGTTACTCATCCTGATGAAGCTAGGTATCTACGAATATTTCAAATGTGGACCTATCTAGCAATTTTT  
ACTTTAGTTACAGCTATGATTTGTCCACTCACTTCAATATAATCTCACTGTCTTGGCAATGCCCTGGA  
GATGTTAAAGTCAGAAATGACCCAGAATCGCCAAGAGAGCTTTGACATCTTTGAAGATGAAGGATTAATT  
ACACAAGGTGGAAGCGGGTATTTGGGATCTGTAGTGAGCCTTATATGAAATATGTATGGAATGGTGAAC  
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GTCAAAGCTGTTGATCTATGGACGACAGTGTATGTCACTCTAATAGCTAGAAGATCCAGTAAATTTGCT  
GGCACCCTTTTCTTAAAGAGGTGCAAACTGTGAGGGTATGTTGCAAAATGAAGTGGAGACTGAACAAA  
TACTCTGCGATGCTTCTGTGATGTCTTCACTGCAGGAAGTTATCTTCATATGTACAAGTTAGAGGATC  
TGTGCCCTTAACTGGTCTCAGGACATTTCAACTATGATGCCTAAACCACCTATTACATTGGATCAGGCA  
GATCCATTTGCACATGTGGCTGCCCTTCACTTTGACCAGATGTTCCAGAGGTTTGGCTCTCCCATCA  
CTTGAATTTAGTGAAGGAACGAGAGAAAAGCATGAAAGAATTTGAGTGAAGATGTTGTTGCTGC  
TGTGACCTATCTCAACCAATTTTGCCTCTGAGCACACTATTGTTTATATTCCTGGGACATGGCCAAG  
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GCACCATGGACCCAGCACTCAAAGACATCATGCAAACCTGTCTAGATATTACAGCAATGCTTTTTTCAG  
ATGCCGATAGACAAGATTCCATTAATCTCTTCTGGGAGTTTTCCATCCCACTGAAGGGAACCTCATCT  
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TATACTTACTGGTGGACACCAGAGGTGATAAAGCATTACCATTGCCCTATGATGAAGTTATCTGTGCTG  
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CTTTGGCCATATGAGTTGAGCAGCTTTGATGATACCTTTTGTGGCTATGACAAGCTCAGCACGTGAC  
TTTATGCCTAAGACCGTTGGAATTGATCCAAGTCCATTTACTGTGCGTAAACCAGATGAACTGGAAAAT  
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TTATTCAGATTTGTTCACTGGGCGAGAGTCAACATAAACAAGACAAGAATAGCCAGCAGCCCTGTTCT  
AGGTGCTCAGATGGAGTTATAAACTAACCCCATCTCGGCTTTCTCGCAAGATAACATCTATGAAGTTC  
AGCCCCAAGAGTAGACAGAAAATCTACAGAGATCTTCCAAGCCACATCCAGGCCAGCCAAGGTATCAT  
GCAGCCCTAGGAAAAGAGGACTCTCCATGTACCGAGAGTACATCAGGAACCGTACTCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC207192 protein sequence  
 Red=Cloning site Green=Tags(s)

MPTAAAPIISSVQKLVLYETRARYFLVGSNNAETKYRVLKIDRTEPKDLVIIDDRHVYTQQEVRELLGRL  
 DLGNRTKMGQKSSGLFRAVSAGVGVFVRFLEGYYIVLITKRRKMADIGGHAIYKVEDTNMIYIPNDSV  
 RVTHPDEARYLRIFQNVDLSSNFYFSYDLSHSLQYNLTVLRMPLEMLKSEMTQNRQESFDIFEDEGLI  
 TQGGSGVFGICSEPYMKYVWNGELLDIIKSTVHRDWLLYIIHGFCGQSKLLIYGRPVYVTLIARRSSKFA  
 GTRFLKRGANCEGDVANEVETEQILCDASVMSFTAGSYSSVYVQVRSVPLYWSQDIDSTMPKPPITLDQA  
 DPFAHVAALHFDQMFQRFSPIIILNLVKEREKRKHERILSEELVAAVTYLNQFLPPEHTIVYIPWDMAK  
 YTKSKLNCVLDRLNVAESVVKKTGFFVNRPDYCSILRPDEKWNELGGCVIPTGRLQTGILRTNCVDCL  
 DRTNTAQFMVGKCALAYQLYSLGLIDKPNLQFDTDAVRLFEELYEDHGDLSLQYGGSQLVHRVKTYRKI  
 APWTQHSKDIMQTL SRYYSNAFSDADRQDSINLFLGVFHPTGKPHLWELPTDFYLHHKNTMRLLPTRRS  
 YTYWWTPEVIKHLPLPYDEVICAVNLKLLIVKKFHKYEEEEIDIHNEFFRPYELSSFDDTFLCLAMTSSARD  
 FMPKTVGIDPSPFTVRKPDETGKSVLGNKSNREEAVLQRKTAASAPPPSEEAVSSSSEDDSGTDREEEG  
 SVSQRSTPVKMTDAGDSAKVTENVVQPMKEL YGINLSDGLSEEDFSIYSRFVQLGQSQHKQDKNSQQPCS  
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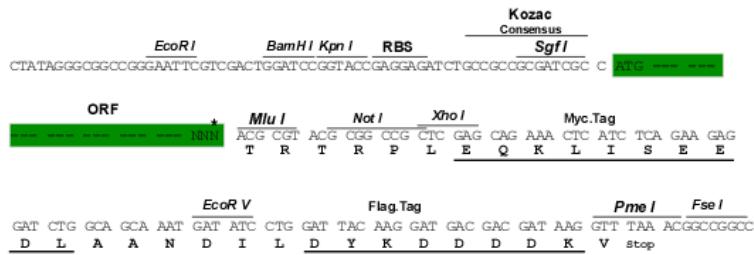
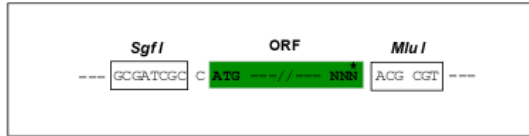
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6341\\_c11.zip](https://cdn.origene.com/chromatograms/mk6341_c11.zip)

**Restriction Sites:** SgfI-MluI

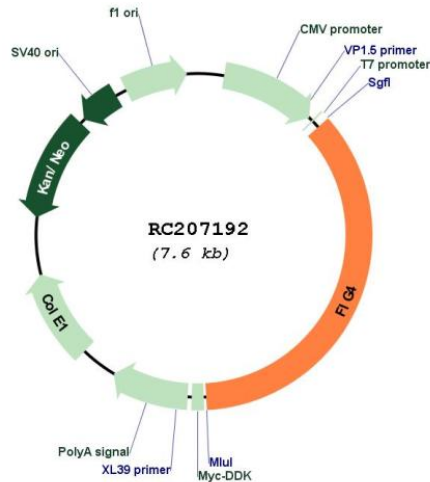
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

## Plasmid Map:



ACCN: NM\_014845

ORF Size: 2721 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.

RefSeq: [NM\\_014845.3](#)

RefSeq Size: 3123 bp

RefSeq ORF: 2724 bp

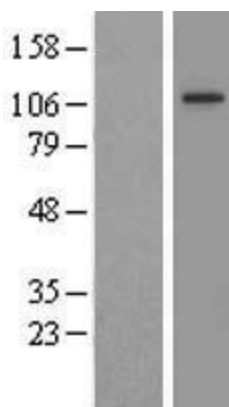
Locus ID: 9896

UniProt ID: [Q92562](#)

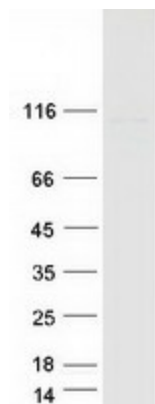
Cytogenetics: 6q21

Domains:	Syja_N
MW:	103.6 kDa
Gene Summary:	The protein encoded by this gene belongs to the SAC domain-containing protein gene family. The SAC domain, approximately 400 amino acids in length and consisting of seven conserved motifs, has been shown to possess phosphoinositide phosphatase activity. The yeast homolog, Sac1p, is involved in the regulation of various phosphoinositides, and affects diverse cellular functions such as actin cytoskeleton organization, Golgi function, and maintenance of vacuole morphology. Membrane-bound phosphoinositides function as signaling molecules and play a key role in vesicle trafficking in eukaryotic cells. Mutations in this gene have been associated with Charcot-Marie-Tooth disease, type 4]. [provided by RefSeq, Jul 2008]

### Product images:



Western blot validation of overexpression lysate (Cat# [LY414969]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207192 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FIG4 protein (Cat# [TP307192]). The protein was produced from HEK293T cells transfected with FIG4 cDNA clone (Cat# RC207192) using MegaTran 2.0 (Cat# [TT210002]).