

Product datasheet for MR222940

Cyfp1 (NM_001164661) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyfp1 (NM_001164661) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyfp1
Synonyms:	E030028J09Rik; I(7)1Rl; I7Rl1; I71Rl; mKIAA0068; P140SRA-1; P140sra1; pl-1; Shyc; Sra-1; Sra1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR222940 representing NM_001164661 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCCCAAGTGACACTAGAGGACGCACTGTCCAATGTGGACCTCCTGGAGGAGCTGCCTCTGCCTG
ACCAGCAGCCCTGCATCGAGCCCCACCGTCTCGCTGCTCTATCAGCCAAATTTCAACACCAACTTTGA
AGACAGAAATGCATTTGCACTGGCATTGCAAGATACATCGAACCAAGCAACTGTCCACTCTAGCATGAAC
GAGATGCTAGAGGAAGGCCAAGAGTATGCTGTCACTGTACACCTGGAGGAGCTGCTCCCGGGCCATCC
CTCAGGTGAAGTGAACGAGCAGCCGAATAGAGTTGAAATTTATGAGAAAACCGTGGAAATCCTTGAACC
CGAGGTCAAAAAGTGAATTTTATGTACTTTTCAGAGAAAATGCCATCGAGCGTTCTGTGGGGAAGTG
AGACGCTGTGTCACTGCTGAGAGGAGAAAGGACTTTGTTTCTGAAGCCTACTTATCACCCTGGGCAAA
TTATCAACATGTTTGTGTGTTGGATGAGCTGAAGAATGAAGTGCAGTGTGAAGAATGACCACTCTGC
ATATAAGAGGGTGTCTCAGTTTTTACGTAAAATGGCAGATCCACAATCCATCCAGGAGTCACAGAATCTG
TCCATGTTCTGGCCAACCACAACAAGATTACACAATCTCTGCAGCAGCAGCTTGAGGTCATTTCTGGCT
ATGAAGAGCTCCTGGCAGACATCGTGAATCTGTGTGGATTACTATGAGAACAGGATGTACTTGCACCC
CAGCGAAAAACACATGCTTCTCAAAGTCATGGGATTTGGCTGTACCTGATGGATGGAGTGTGAGTAAC
ATCTACAAAAGTATGCAAGAAAAGAATAAATTTATCCAAAATCGACAAGTATTTCAAGCAGCTGCAGG
TGGTTCCACTCTTTGGAGATATGCAAAATAGAAGTGGCAAGATACATCAAGACCAGCGCACACTATGAGGA
GAATAAGTCCCGTGGACCTGCGCGTCTCCAGCAGCAGCCGAGTACAACATCTGTGAGCAGATGATC
CAGATCCGTGAGGACCATATGCGTTTCATCTCCGAGCTGGCAGCTACAGCAATAGCGAGGTAGTCACAG
GGTCTGGCCGGCAGGAAGCCAGAAGACAGATGCTGAGTACCGGAAGCTCTTCGATCTGGCTCTGCAGGG
CCTGCAGCTTCTGTCGAGTGGAGCGCTCAGTGTGAAAGTGTATTCTGGAACTTGTACATCCAACA
GACAAGTACTCCAACAAGGACTGCCCGACAACGCTGAGGAGTACGAGCGAGCCACAGCTACAACACTACA
CCACTGAGGAGAAGTTTGCCTGGTGGAGGTGATTGCCATGATCAAAGGCTGCAGGTGCTGATGGGCGAG
GATGGAGAGTGTGTTCAATCACGCCATCAGACACAGGTTTACGCTGCGCTTCAGGACTTCTCCAGGTTG
ACCCTCAGGGAACCACTGCGACAGGCCATCAAGAAGAAAAGAACGTAATCCAGAGTGTCTACAGGCCA



[View online >](#)

TCAGGAAGACTGTGTGTGACTGGGAGACTGGGCATGAGCCCTTTAACGACCCAGCTCTGCGGGGAGAGAA
GGACCCTAAGAGTGGCTTTGACATCAAGGTGCCACGCCGTGCTGTGGACCCTCCAGCACGCAGCTTTAC
ATGGTGAGAACTATGCTAGAGTCCCTCATTGCAGACAAAAGTGGTTCCAAGAAAACCTTGAGAAGTAGCC
TTGAGGGGCCACCATATTGGACATAGAAAAATTCATCGAGAATCATTCTTCTACACTCACTTGATAAA
TTTCAGTGAACACTGCAGCAGTGTGTGACCTTTCCAGCTGTGGTCCGAGAGTTCTTCTGGAGCTG
ACCATGGGCAGGAGGATCCAGTTCCTTCCATTGAGATGTCTATGCCCTGGATTCTGACTGACCACATCCTAG
AGACCAAGGAGGCATCAATGATGGAGTACGTCTACTCTTGGACCTGTACAACGACAGTGGCCACTA
TGGCTCACCAAGTTCAACAAGCAGTTTCTCTATGATGAGATTGAGGCAGAGGTGAATCTGTGTTTTGAC
CAATTTGTTTATAAACTAGCAGACCAGATATTTGCATATTACAAGTTATGGCAGGAAGTTTGCTTCTTG
ACAAAAGTTACGGTCAGAATGCAAAAATCAGGGAGCCACGATCCACCTCCCCCATCTAACCGCTATGA
GACGCTGTTGAGCAAAGGCACGTGCAGCTGCTCGGGAGATCCATTGATCTCAACCGTCTGATTACACAG
CGCGTTTCAGCAGCCATGTACAATCTCTAGAACTGGCAATTGGACGTTTGAAGTGAAGATTTAACAT
CAGTAGTCGAGCTAGATGGACTTTAGAAATCAACCGTATGACACACAAGCTGTTGAGCAGGTACCTCAC
ACTGGACAGCTTTGATGCCATGTTCCGGGAAGCCAACCACAACGTGTCTGCACCTTATGGAAGAATTACC
CTCCACGTCTTCTGGGAGCTAACTATGACTTCTTGCCCAACTACTGCTATAATGGCTCTACCAACCGGT
TTGTTCCGACAGTATTACCAATTTCTCAGGAATTTCAAAGAGACAAACAGCCTAACGCACAGCCCCAGTA
TTTGATGGATCCAAGGCTTTGAACCTAGCCTACTCAAGCATTTATGGCAGCTACCGGAACCTTTGTTGGG
CCTCCGCACTTCCAAGTCATCTGCCGGCTACTTGGCTACCAGGGCATTGCAGTAGTCATGGAAGAGCTGC
TGAAGGTTGTCAAGAGCCTGCTGCAAGGCACAATCCTGCAGTACGTGAAAACCTCTGATGGAAGTGTGCC
CAAGATCTGCCGGCTTCCGCGCATGAGTACGGCTCTCTGGCATCCTGGAGTCTTCCACCACCAGCTG
AAGGACATTGTGGAGTATGCAGAGCTGAAAACCGTATGCTTCCAGAACCTGCGGGAGGTGGGCAATGCTG
TTCTCTTCTGCCTGCTTATTGAGCAAAGCCTGTCTTTAGAAGAAGTCTGTGACCTGTTGCATGCAGCTCC
TTTCCAGAATATCTTACCTCGAATCCATGTAAAAGAGGGGGAGAGAGTTGATGCCAAAATGAAAAGACTA
GAATCCAAGTATGCCCCACTGCACCTTGTCCCACTGATTGAAAGGCTGGGGACCCACAGCAAATTGCAA
TTGCAAGAGAGGGGGACTTGCTAACCAAGGAGCGTCTCTGTTGTGGTCTGTCCATGTTTGAAGTCATCCT
GACACGGATCCGGACCTTTCTGGATGATCCCATCTGGCGTGGGCCCTACCCAGCAATGGTGTGCATGCAC
GTGGATGAGTGTGTGGAGTTTACAGACTATGGAGTGCCATGCAGTTTGTACTGCATTCTGTAGGGA
CACACGAGTTTACAGTGGAGCAGTGTGGAGATGGGCTCCACTGGGCTGGCTGCATGATCATTGTACT
TCTTGGACAGCAGCGCGCTTTGCTGTGTTGGATTTCTGCTATCATCTTCTCAAAGTTCAGAAACATGAT
GGCAAAGATGAGATCATCAAAAATGTGCCATTGAAGAAGATGGTGGAGAGGATCCGCAAGTTCAGATTC
TCAACGATGAAATCATCACTATCTGGACAAGTACTTGAATCTGGTGTGGCGAGAGCACACCTGTGGA
GCATGTACGCTGCTTCCAGCCACCCATCCACCAGTCCCTAGCCAGTAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222940 representing NM_001164661
 Red=Cloning site Green=Tags(s)

MAAQVTLEDALSNVDLLEELPLPDQQPCIEPPSSLLYQPNFNTNFEDRNAFVTGIARYIEQATVHSSMN
 EMLEEGQEYAVMLYWRSCSRAIPQVKCNEQPNRVEIYEKTVLEVEPEVTKLMNMFYQRNAIERFCGEV
 RRLCHAERRKDFVSEAYLITLGKFINMFAVLDELKNMKCSVKNDHSAYKRAAQFLRKMADPQSIQESQNL
 SMFLANHNKITQSLQQQLEVISGYEELLADIVNLCVDYENRMYLTPSEKHMLLKVMGFGLYLMDGSVSN
 IYKLDAKKRINLSKIDKYFKQLQVVPVLFQDMQIELARYIKTSAHYEENKSRWTCASSSSSPQYNICEQMI
 QIREDHMRFISELARYSNSEVVTGSGRQEAQKTDAYRKLFDLALQGLQLLSQWSAHVMEVYSWKLVHPT
 DKYSNKDCPDNAEEYERATRYNYTTEEFALVEVIAMIKGLQVLMGRMESVFNHAI RHTVYAALQDFSQV
 TLREPLRQAIIKKKNVIVSVLQAIRKTVCDWETGHEPFNDPALRGEKDPKSGFDIKVPRRAVGPSTQLY
 MVRTMLES LIADKSGSKTLRSSLEGPTILDIEKFHRESFFYTHLINFSETLQQCCDLSQLWFEFFLEL
 TMGRRIQFPPIEMSPWILTDHILETKEASMMYVLYSLDLYNDSAHYALTKFNKQFLYDEIEAEVNLCFD
 QFVYKADQIFAYYKVMAGSLLLDKRLRSECKNQGATIHLPSSNRJETLLKQRHVQLLGRSIDLNLITQ
 RVSAAMYKSLELAIGRFESEDLTSVVELDGLLEINRMTHKLLSRYLTLDSFDAMFREANHNVSAPYGRIT
 LHVFWELNYDFLPNYCYNGSTNRFVRTVLPFSQEFQRDKQPNAPQYLHGSKALNLA YSSIIYGSYRNFVG
 PPHFQVICRLLGYQGIADVMEELLKVVKSLQGTILQYVKTLMEVMPKICRLPRHEYGSPGILEFFHHQL
 KDIVEYAEKTKVCFQNLREVGNVAVLFCLLIEQSLSLEEVCDLLHAAPFQNILPRIHVKEGERVDAKMKRL
 ESKYAPLHLVPLIERLGTQQIAIAREGDLLTKERLCCGLSMFEVILTRIRTFLLDDPIWRGPLSPNGVMH
 VDECVEFHRLWSAMQFVYICIPVGTHEFTVEQCQFGDGLHWAGCMIIVLLGQQRRFVAVLDFCYHLLKVQKHD
 GKDEIIKNVPLKKMVERIRKFQILNDEIITILDKYLKSGDGESTPVEHVRCFQPPIHQSLASS

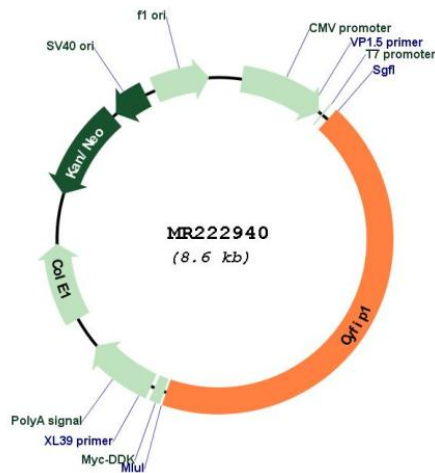
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001164661

ORF Size: 3759 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_001164661.1](#), [NP_001158133.1](#)

RefSeq Size: 6524 bp

RefSeq ORF: 3762 bp

Locus ID: 20430

UniProt ID: [Q7TMB8](#)

Cytogenetics: 7 B5

MW: 145.7 kDa

Gene Summary: Component of the CYFIP1-EIF4E-FMR1 complex which binds to the mRNA cap and mediates translational repression. In the CYFIP1-EIF4E-FMR1 complex this subunit is an adapter between EIF4E and FMR1. Promotes the translation repression activity of FMR1 in brain probably by mediating its association with EIF4E and mRNA (By similarity). Regulates formation of membrane ruffles and lamellipodia. Plays a role in axon outgrowth. Binds to F-actin but not to RNA. Part of the WAVE complex that regulates actin filament reorganization via its interaction with the Arp2/3 complex. Actin remodeling activity is regulated by RAC1. Regulator of epithelial morphogenesis. May act as an invasion suppressor in cancers. As component of the WAVE1 complex, required for BDNF-NTRK2 endocytic trafficking and signaling from early endosomes (PubMed:27605705).[UniProtKB/Swiss-Prot Function]