

Product datasheet for **MR210309**

Fchsd2 (NM_199012) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fchsd2 (NM_199012) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fchsd2
Synonyms:	BC034086; mKIAA0769; R74866; Sh3md3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR210309 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGACTTTCAGTCAGAAGAAGGCTGCTATTGAAAGAGAGTATGCACAGGGTATCCAGAAGTTGGCTA
GTCAATACCTGAAGAGAGATTGGCTTGAATAAAAAGTATGATCGGAATGATTACAGGAGTATGTATCC
TGTTTGAAATCTTTCTCGAGGGAACAATGCAGGTAGCCAGTCTCGGATCAATATATGTGAAAATAT
AAAAACTTCATTTCTGAACCTGCAAGAGCAGTAAGAAGCTTAAAAGAACAGCAACTAAAACGGTGTGTGG
ATCAGTTGACAAAGATCCAAACAGAATTACAGGAACTGTGAAAGATTTAGTGAAAGGCAAAAAGAAGTA
CTTTGAGACTGAACAGATGGCTCATGCAGTAAGAGAGAAAGCTGACATCGAAGCAAAGTCTAACTTAGT
CTTTTTCAATCAAGAATCAGTTTACAGAAAGCAAGTGTGAAGTTAAAAGCCCGGCGATCTGAATGAATA
CCAAAGCTACCCATGCAAGGAATGATTACCTTCTGACGCTAGCAGCAGCTAACGCACATCAGGACCCTA
CTATCAAACAGACTTAGTTAACATCATGAAGGCTCTTGATGGAAACGTGTATGACCACCTCAAGGATTAT
TTAATAGCCTTCAGCCGACCGAGCTAGAACTTGCCAAGCTATACAGAATACATTCCAGTTTTACTAG
AAAACCTCCAGCAAGGTGGTACGGGACTATAACCTTCAGCTGTTTCTACAAGAAATGCTGTATTTACAA
GCCTCAGCCCTTCCAGTTCAGCCTTGTGACAGTGATACTAGTTTAAAAGCCGCCAACTGGTGGATATT
GAGCTCTCCCCTGTCAGTGCTCTGAGAATGACGATAGCTGAGAGTCGACAATTAGAATCAGAAAATGGTA
CCACAGAGGAACACAGTCTAAATAAGGAGGCTCGGAAATGGGCCACACGTGTGGCACGTGAGCACAAAA
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GCAGAGCTGGAACAGAAAATAGATGAAGCAAGAGAAAGTATCCGTAAGCAGAGATCATTAAATGAAAG
CTGAAGCCCGCTAGACCTACTGAAGCAGATTGGGGTTTCTGTAGATACGTGGTTAAAGAGTGCCATGAA
CCAAGTGATGGAGGAAGTAAAGAAATGAGCGGTGGGCCCTCCTCCAGCCGTGACCAGCAATGGCACTCTA
CACTCGTTAATGCAGATGCTGAAAGAGAAGAAGGAGAAGAGTTTGAAGCAACATGGATGTTTTTGATG
ACAGCAGCTCCAGCCCTTCTGGCACCTTGAAGAAATATCCACTCACCTGCAAAGTTGTTTATTCCTATAA
GGCTTCTCAACCAGATGAGTTGACCATTGAGGAACATGAGGTGTTAGAAGTGAAGATGGAGATATG
GAAGACTGGGTAAGGCTCGAAATAAGTTGGCCAAGTGGGTTATGTGCCAGAAAAGTACCTACAATTTCC
CCACTCGAACAGCCTACTGAGCATGCTACAGTCTTTGGCTGCTTTGGACAGTCGGTACACACATCCAG
CAATTCACAGAAGCAGAACTCGTTTCAGGCAGCCTGAATGGAGATGCCAGTGTCTGTTTTGTGAAAGCA
CTTTATGATTATGAGGGCCAGACAGATGATGAGCTGCTTTCCCGAGGGAGCAATATTTCGCATCTTGA
ACAAAGAAAACCAAGATGATGATGGCTTCTGGGAAGGGGAGTTCAGTGGTGAATCGGTGTTTTCCCATC
GGTGTAGTGGAAGAGCTCTCAGCCTCCGAGAATGGCGACACTCCATGGACAAGAGAGATCCAGATCTCT
CCATCCCCAAGCCTCACACATCCCTGCCTCCACTGCCTCTGTATGACCAGCCACCAGCAGCCCGTATC
CCAGTCCAGATAAGAGGAGCTCCAGTTCTTCCCCGGTCTCCTTCAGCCAATGAAAACAGCCTTCATGC
TGAATCACCAGGATTCACAGGCCTCAAGACAGACTCCTGACACCTCATATGGCAAGCTGCGGCCTGTT
CGGGCGGCGCCACCACCCACAGAACCCGCGGACAACCTGAGAAGATGGAGGACGTGGAGATCA
CACTGGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210309 protein sequence
Red=Cloning site Green=Tags(s)

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MRTFSQKAAIEREYAQGIQKLASQYLKRDWPGIKTDDRNDYRSMYPVWKSFLLEGTMQVAQSRINICENY
KNFISEPARAVRSLKEQQLKRCVDQLTKIQTELQETVKDLVKGKKKYFETEQMAHAVREKADIEAKSKLS
LFQSRISLQKASVKLKARRSECNTKATHARNDYLLTLAAANAHQDRYYQTDLVNIMKALDGNVYDHLKDY
LIAFSRTELETQCAIQNTFQFLLENSKVVVDYDNLQLFLQENAVFHKPQPFQFQPCSDTSLKAAQLVDI
ELSPVSALRMTIAESRQLESETGTTEEHLNKEARKWATRVAREHKNIVHQQRVLNELECHGVALSEQSR
AELEQKIDEARESIRKAEI IKLKAEARLDLLKQIGVSVDTWLK SAMNQVMEELENERWARPPAVTSNGTL
HSLNADAERE EEEFEDNMDVFDSSSSPSGTLRNYPLTKVVYSYKASQPDEL TIEEHEVLEVI EDGDM
EDWVKARNKVGQVGVVPEKYLQFPTSNSLLSMLQSLAALDSRSH TSSNSTEAE L VSGSLNGDASVCFVKA
LYDYEGQTDEL SFPEGAIIRILNKENQDDGFWEGEFSGRIGVFP SVLVEELASENG DTPWTREIQIS
PSPKPHTSLPPLPLYDQPPSSYPSPDKRSSQFFPRSPSANENSLHAESPGFSQASRQTPDTSYGLLRPV
RAAPPPPTQNHRRTTEKMEDVEITLV
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_199012

ORF Size: 2181 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_199012.1](#), [NP_950177.1](#)

RefSeq Size: 4432 bp

RefSeq ORF: 2295 bp

Locus ID: 207278

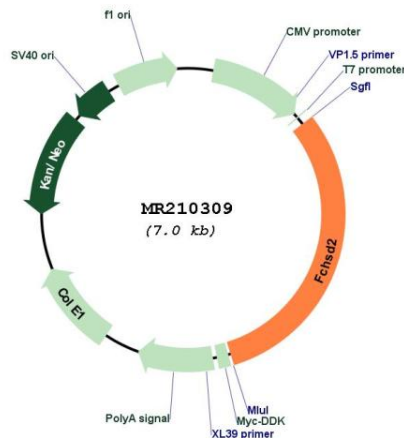
UniProt ID: [Q3USJ8](#)

Cytogenetics: 7 E2

MW: 82.4 kDa

Gene Summary: Adapter protein that plays a role in endocytosis via clathrin-coated pits. Contributes to the internalization of cell surface receptors, such as integrin ITGB1 and transferrin receptor. Promotes endocytosis of EGFR in cancer cells, and thereby contributes to the down-regulation of EGFR signaling. Recruited to clathrin-coated pits during a mid-to-late stage of assembly, where it is required for normal progress from U-shaped intermediate stage pits to terminal, omega-shaped pits. Binds to membranes enriched in phosphatidylinositol 3,4-bisphosphate or phosphatidylinositol 3,4,5-trisphosphate (By similarity). When bound to membranes, promotes actin polymerization via its interaction with WAS and/or WASL which leads to the activation of the Arp2/3 complex (PubMed:23437151). Does not promote actin polymerisation in the absence of membranes (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210309