

Product datasheet for **RC205842**

FRS2 (NM_006654) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FRS2 (NM_006654) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FRS2
Synonyms:	FRS1A; FRS2A; FRS2alpha; SNT; SNT-1; SNT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC205842 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGTAGCTGTTGTAGCTGTCCAGATAAAGACTGTCCAGATAACCATCGGAACAAGTTAAGGTCA
 TTAATGTGGATGATGATGGGAATGAGTTAGGTTCTGGCATAATGGAACCTACAGACACAGAAGTATTTT
 ATACACCCGCAAACGTGACTCAGTAAAAATGGCACTACCTCTGCCTGCGACGCTATGGCTATGACTCGAAT
 CTCTTTCTTTTGAAGTGGTCGAAGGTGTCAAACCTGGACAAGGAATCTTTGCCTTTAAGTGTGCCCGTG
 CAGAAGAATTATTAACATGTTGCAAGAGATTATGCAAAATAATAGTATAAATGTGGTGGAAAGAGCCAGT
 TGTAGAAAAGAAATAATCATCAGACAGAATTGGAAGTCCCTAGAACACCTCGAACACCTACAACCTCCAGGA
 TTTGCTGCTCAGAACTTACCTAATGGATATCCCGGATATCCCTCATTTGGAGATGCTTCATCCCATCCGT
 CAAGCAGACATCCTTCTGTGGGAAGTGTCTGCCTGCCTCAGTAGGGGAAGAATCTACACATCCTTTGCT
 TGTGGCTGAGGAACAAGTACATACTATGTCAACACTACAGGTGTCAAGAAGAGCGGAAAAACCGCACA
 AGTGTGCATGTTCCATTGGAGGCAAGGGTTTCTAACGCTGAAAGCAGCACACCAAAAAGAAGAACCAAGTA
 GTATTGAGGACAGGGATCCTCAGATTCTTCTTGAACCTGAAGGAGTCAAATTTGTTTTAGGGCAACCCC
 TGTTCAAAGCAGTTAATGGAAAAGAGAACTGGAGCAACTGGAAAGAGATCAAGTTAGTGAAGTGGGA
 GCAAAATAACACAGAATGGGACTGGCTATGACAGTGTGAACGAAGAGATGCACCCTCTGTTAACAAAAC
 TGGTGTATGAAAATAAATGGGCTATCTATCCCTAGTGCCTCAGGGGTGAGGAGGTCGCTGACATC
 CACCAGTACCTCAGATACCCAGAATATCAACAACCTCAGCTCAGAGAAGAACTGCATTATTAACCTATGAA
 AATCTACCATCTTTGCCTCCTGTTTGGGAAGCCGCAAGCTAAGTAGGGATGAAGTACAATTTAGGAA
 CAAAGACCCCATCTCTAAATGGTACCATAATAATCTAGATCCAATGCATAACTATGTAATACAGAGAA
 TGTAACAGTGCCAGCAAGTGTCTACAAAATAGAATATTCAGGGCTCGGGACTGTACACCAACAGTCTTT
 AACTTTGATATCAGACGCCCAAGTTTAGAACACAGGCAGCTTAATTACATACAGTTGACTTGAAGGTG
 GCAGTACTCTGACAACCTCAGACTCCAAAACGCCTACAACCTCCCCTCCACAAAACCCCTACCAGGCG
 CACAGAGCTGTATGCCGTGATAGACATCGAGAGAAGTGTCTGTATGTCAAATTTGCAGAAAGCACTGCCA
 CGAGATGATGGTACATCTAGGAAAACCTAGACACAATAGTACTGATCTGCCCATGTTAGCTGGAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205842 protein sequence
 Red=Cloning site Green=Tags(s)

MGSCCSPDKDTPVDNHRNFKVINVDDDGNELGSGIMELDTELILYTRKRDSVKWHYLCLRRYGYDSN
 LFSFESGRRRCQTGQGFIFAFKCARAEELFNMLQEIMQNNSINVVEEPVVERNHHQTELEVPRTPTPTTPG
 FAAQNLPNGYPRYPSFGDASSHPSSRHPSVGSARLPSVGEESTHPLLVAEEQVHTYVNTTGVQEERKNRT
 SVHVPLEARVSNAESSTPKEEPSSIEDRDPQILLEPEGVKFVLGPTPVQQLMEKEKLEQLGRDQVSGSG
 ANNTEWDTGYDSDERRDAPSVNKL VYENINGLSIPSASGVRRGRLTSTSTSDTQINNSAQRRTALLNYE
 NLPSPPPWEARKLSRDEDDNLGPKTPSLNGYHNNLDPMHNYVNTENVTPASAHKIEYSRRRDCTPTVF
 NFDIRRPSEHRQLNYIQVDLEGGSDSDNPQTPKTPPTPLPQTPTRTEL YAVIDIERTAAMS NLQKALP
 RDDGTSRKTRHNSTDLPMLAWK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6064_h11.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_006654

ORF Size: 1536 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_006654.2](#), [NP_006645.2](#)

RefSeq Size: 6883 bp

RefSeq ORF: 1527 bp

Locus ID: 10818

UniProt ID: [Q8WU20](#)

Cytogenetics: 12q15

Domains: IRS

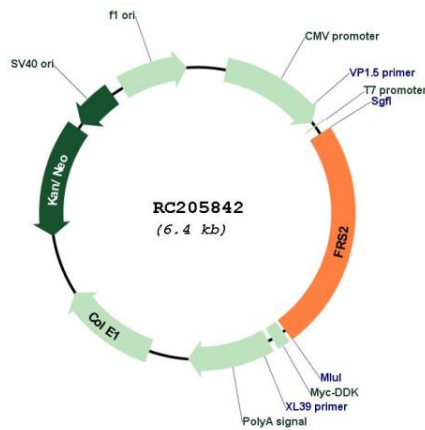
Protein Families: Druggable Genome

Protein Pathways: Neurotrophin signaling pathway

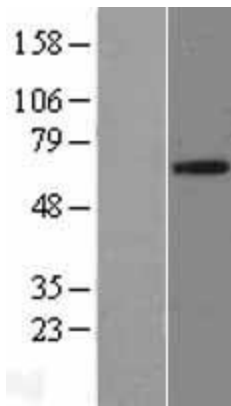
MW: 57.5 kDa

Gene Summary: Adapter protein that links activated FGR and NGF receptors to downstream signaling pathways. Plays an important role in the activation of MAP kinases and in the phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, in response to ligand-mediated activation of FGFR1. Modulates signaling via SHC1 by competing for a common binding site on NTRK1.[UniProtKB/Swiss-Prot Function]

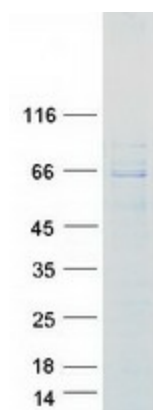
Product images:



Circular map for RC205842



Western blot validation of overexpression lysate (Cat# [LY401989]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205842 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FRS2 protein (Cat# [TP305842]). The protein was produced from HEK293T cells transfected with FRS2 cDNA clone (Cat# RC205842) using MegaTran 2.0 (Cat# [TT210002]).