

## Product datasheet for **RC238619**

### FRS2 (NM\_001278351) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FRS2 (NM_001278351) 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)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC238619 representing NM\_001278351  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGTAGCTGTTGTAGCTGTCCAGATAAAGACTGTCCAGATAACCATCGGAACAAGTTTAAGTCA  
 TTAATGTGGATGATGATGGGAATGAGTTAGTTCTGGCATAATGGAACCTACAGACACAGAAGTATTTT  
 ATACACCCGCAAACGTGACTCAGTAAAAATGGCACTACCTCTGCCTGCGACGCTATGGCTATGACTCGAAT  
 CTCTTTCTTTTAAAAGTGGTCGAAGGTGTCAAAGTGGACAAGGAATCTTTGCCTTTAAGTGTGCCCGTG  
 CAGAAGAATTATTAACATGTTGCAAGAGATTATGCAAAAATAAGTATAAATGTGGTGGAAAGAGCCAGT  
 TGTAGAAAAGAAATAATCATCAGACAGAATTGGAAGTCCCTAGAACACCTCGAACACCTACAACCTCCAGGA  
 TTTGCTGCTCAGAACTTACCTAATGGATATCCCGGATATCCCTCATTTGGAGATGCTTCATCCCACCGT  
 CAAGCAGACATCCTTCTGTGGGAAGTGTCTGCCTGCCTCAGTAGGGGAAGAATCTACACATCCTTTGCT  
 TGTGGCTGAGGAACAAGTACATACCTATGTCAACACTACAGGTGTCAAGAAGAGCGGAAAAACCGCACA  
 AGTGTGCATGTTCCATTGGAGGCGAGGGTTTCTAACGCTGAAAGCAGCACACCAAAAAGAAGAACCAAGTA  
 GTATTGAGGACAGGGATCCTCAGATTCTTCTTGAACCTGAAGGAGTCAAATTTGTTTTAGGGCAACCCC  
 TGTTCAAAGCAGTTAATGGAAAAGAGAACTGGAGCAACTGGAAAGAGATCAAGTTAGTGAAGTGGGA  
 GCAAAATAACACAGAATGGGACTGGCTATGACAGTGTGAACGAAGAGATGCACCCTCTGTTAACAAAAC  
 TGGTGTATGAAAATAAATGGGCTATCTATCCCTAGTGCCTCAGGGGTGAGGAGGTCGCTGACATC  
 CACCAGTACCTCAGATACCCAGAATATCAACAACCTCAGCTCAGAGAAGAACTGCATTATTAACATGAA  
 AATCTACCATCTTTGCCTCCTGTTTGGGAAGCCGCAAGCTAAGTAGGGATGAAGTACAATTTAGGAA  
 CAAAGACCCCATCTCTAAATGGTACCATAATAATCTAGATCCAATGCATAACTATGTAATACAGAGAA  
 TGTAACAGTGCCAGCAAGTGTCTACAAAATAGAATATTCGAAGGCTCGGGACTGTACACCAACAGTCTTT  
 AACTTTGATATCAGACGCCCAAGTTTAGAACACAGGCAGCTTAATTACATACAGTTGACTTGAAGGTG  
 GCAGTACTCTGACAACCTCAGACTCCAAAACGCCTACAACCTCCCCTCCACAAAACCCCTACCAGGCG  
 CACAGAGCTGTATGCCGTGATAGACATCGAGAGAAGTGTCTGTATGTCAAATTTGCAGAAAGCACTGCCA  
 CGAGATGATGGTACATCTAGGAAAACCTAGACACAATAGTACTGATCTGCCCATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238619 representing NM\_001278351  
 Red=Cloning site Green=Tags(s)

MGSCCSPDKDTPVDNHRNFKVINVDDDGNELGSGIMELDTELILYTRKRDSVKWHYLCLRRYGYDSN  
 LFSFESGRRCQTGQGFIAFKCARAEELFNMLQEIMQNNSINVVEEPVVERNHHQTELEVPRTPTPTTPG  
 FAAQNLPNGYPRYPSTFGDASSHPSSRHPSVGSARLPSVGEESTHPLLVAEEQVHTYVNTTGVQEERKNRT  
 SVHVPLEARVSNAESSTPKEEPSSIEDRPQILLEPEGVKFVLGPTPVQQLMEKEKLEQLGRDQVSGSG  
 ANNTEWDTGYDSDERRDAPSVNKL VYENINGLSIPSASGVRRGRLTSTSTSDTQINNSAQRRTALLNYE  
 NLPSPPPWEARKLSRDEDDNLGPKTPSLNGYHNNLDPMHNYVNTENVTPASAHKIEYSRRRDCTPTVF  
 NFDIRRPSEHRQLNYIQVDLEGGSDSDNPQTPKTPPTPLPQTPTRTEL YAVIDIERTAAMS NLQKALP  
 RDDGTSRKTRHNSTDLP

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6667\\_g01.zip](https://cdn.origene.com/chromatograms/mk6667_g01.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001278351

**ORF Size:** 1524 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\\_001278351.2](#)

**RefSeq Size:** 6997 bp

**RefSeq ORF:** 1527 bp

**Locus ID:** 10818

**UniProt ID:** [Q8WU20](#)

**Cytogenetics:** 12q15

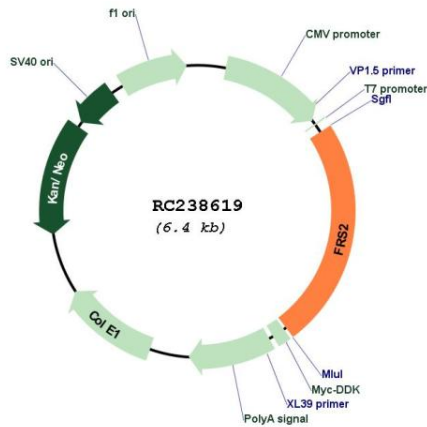
**Protein Families:** Druggable Genome

**Protein Pathways:** Neurotrophin signaling pathway

**MW:** 57 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 RC238619