

## Product datasheet for **RC238623**

### FRS2 (NM\_001278356) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FRS2 (NM_001278356) 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:**

>RC238623 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGTAGCTGTTGTAGCTGTCCAGATAAAGACTGTCCAGATAACCATCGGAACAAGTTAAGTCA  
 TTAATGTGGATGATGATGGGAATGAGTTAGTTCTGGCATAATGGAACCTACAGACACAGAACTGATTTT  
 ATACACCCGCAAACGTGACTCAGTAAAAATGGCACTACCTCTGCCTGCGACGCTATGGCTATGACTCGAAT  
 CTCTTTCTTTTAAAAGTGGTCGAAGGTGTCAAACCTGGACAAGGAATCTTTGCCTTTAAGTGTGCCCGTG  
 CAGAAGAATTATTAACATGTTGCAAGAGATTATGCAAAAATAAGTATAAATGTGGTGGAAAGAGCCAGT  
 TGTAGAAAAGAAATAATCATCAGACAGAATTGGAAGTCCCTAGAACACCTCGAACACCTACAACCTCCAGGA  
 TTTGCTGCTCAGAACTTACCTAATGGATATCCCGGATATCCCTCATTTGGAGATGCTTCATCCCACCGT  
 CAAGCAGACATCCTTCTGTGGGAAGTGTCTGCCTGCCTCAGTAGGGGAAGAATCTACACATCCTTTGCT  
 TGTGGCTGAGGAACAAGTACATACCTATGTCAACACTACAGGTGTCAAGAAGAGCGGAAAAACCGCACA  
 AGTGTGCATGTTCCATTGGAGGCAAGGGTTTCTAACGCTGAAAGCAGCACACCAAAAAGAAGAACCAAGTA  
 GTATTGAGGACAGGGATCCTCAGATTCTTCTTGAACCTGAAGGAGTCAAATTTGTTTTAGGGCAACCCC  
 TGTTCAAAGCAGTTAATGGAAAAGAGAACTGGAGCAACTGGAAAGAGATCAAGTTAGTGAAGTGGGA  
 GCAAAATAACACAGAAATGGGACTGGCTATGACAGTGTGAACGAAGAGATGCACCCTCTGTTAACAAAAC  
 TGGTGTATGAAAATAAATGGGCTATCTATCCCTAGTGCCTCAGGGGTGAGGAGGTCGCTGACATC  
 CACCAGTACCTCAGATACCCAGAATATCAACAACCTCAGCTCAGAGAAGAACTGCATTATTAACCTATGAA  
 AATCTACCATCTTTGCCTCCTGTTTGGGAAGCCGCAAGCTAAGTAGGGATGAAGATGACAATTTAGGAA  
 CAAAGACCCCATCTCTAAATGGCTACCATAATAATCTAGATCCAATGCATAACTATGTAATACAGAGAA  
 TGTAACAGTGCCAGCAAGTGTCTACAAAATAGAATATTCAGGGCTCGGGACTGTACACCAACAGTCTTT  
 AACTTTGATATCAGACGCCCAAGTTTAGAACACAGGCAGCTTAATTACATACAGTTGACTTGAAGGTG  
 GCAGTACTCTGACAACCTCAGACTCCAAAACGCCTACAACCTCCCCTCCACAAAACCCCTACCAGGCG  
 CACAGAGCTGTATGCCGTGATAGACATCGAGAGAAGTGTCTGTATGTCAAATTTGCAGAAAGCACTGCCA  
 CGAGATGATGGTACATCTAGGAAAACCTAGACACAATAGTACTGATCTGCCCATGTTAGCTGGAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238623 protein sequence  
 Red=Cloning site Green=Tags(s)

MGSCCSPDKDTPVDNHRNFKVINVDDDGNELGSGIMELDTELILYTRKRDSVKWHYLCLRRYGYDSN  
 LFSFESGRRRCQTGQGFIFAFKCARAEELFNMLQEIMQNNSINVVEEPVVERNHHQTELEVPRTPTPTTPG  
 FAAQNLPNGYPRYPSFGDASSHPSSRHPSVGSARLPSVGEESTHPLLVAEEQVHTYVNTTGVQEERKNRT  
 SVHVPLEARVSNAESSTPKEEPSSIEDRDPQILLEPEGVKFVLGPTPVQQLMEKEKLEQLGRDQVSGSG  
 ANNTEWDTGYDSDERRDAPSVNKL VYENINGLSIPSASGVRRGRLTSTSTSDTQINNSAQRRTALLNYE  
 NLPSPVWEARKLSRDEDDNLGPKTPSLNGYHNNLDPMHNVNTENVTPASAHKIEYSRRRDCTPTVF  
 NFDIRRPSEHRQLNYIQVDLEGGSDSDNPQTPKTPPTPLPQTPTRTEL YAVIDIERTAAMS NLQKALP  
 RDDGTSRKTRHNSTDLPMLAWK

**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\_001278356

**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\\_001278356.1](#), [NP\\_001265285.1](#)

**RefSeq Size:** 6815 bp

**RefSeq ORF:** 1527 bp

**Locus ID:** 10818

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

**Cytogenetics:** 12q15

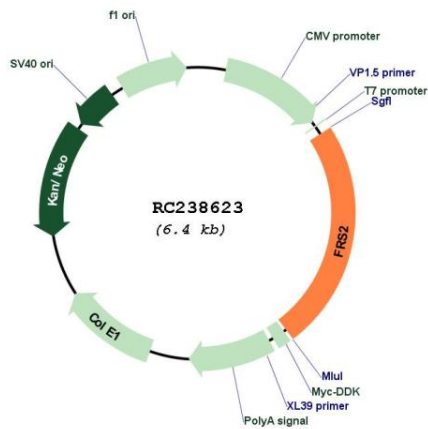
**Protein Families:** Druggable Genome

**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 RC238623