

## Product datasheet for **RC238621**

### FRS2 (NM\_001278354) Human Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                        |
| Product Name:             | FRS2 (NM_001278354) 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:**

>RC238621 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGTAGCTGTTGTAGCTGTCCAGATAAAGACTGTCCAGATAACCATCGGAACAAGTTAAGTCA  
 TTAATGTGGATGATGATGGGAATGAGTTAGTTCTGGCATAATGGAACCTACAGACACAGAAGTATTTT  
 ATACACCCGCAAACGTGACTCAGTAAAAATGGCACTACCTCTGCCTGCGACGCTATGGCTATGACTCGAAT  
 CTCTTTCTTTTGAAGTGGTCGAAGGTGTCAAAGTGGACAAGGAATCTTTGCCTTTAAGTGTGCCCGTG  
 CAGAAGAATTATTAACATGTTGCAAGAGATTATGCAAAATAATAGTATAAATGTGGTGGAGAGCCAGT  
 TGTAGAAAAGAAATAATCATCAGACAGAATTGGAAGTCCCTAGAACACCTCGAACACCTACAACCTCCAGGA  
 TTTGCTGCTCAGAAGTACCTAATGGATATCCCGGATATCCCTCATTTGGAGATGCTTCATCCCACCGT  
 CAAGCAGACATCCTTCTGTGGGAAGTGTCTGCCTGCCTCAGTAGGGGAAGAATCTACACATCCTTTGCT  
 TGTGGCTGAGGAACAAGTACATACTATGTCAACACTACAGGTGTCAAGAAGAGCGGAAAAACCGCACA  
 AGTGTGCATGTTCCATTGGAGGCAAGGGTTTCTAACGCTGAAAGCAGCACACCAAAAAGAAGAACCAAGTA  
 GTATTGAGGACAGGGATCCTCAGATTCTTCTTGAACCTGAAGGAGTCAAATTTGTTTTAGGGCAACCCC  
 TGTTCAAAGCAGTTAATGGAAAAGAGAACTGGAGCAACTGGAGAGATCAAGTTAGTGAAGTGGAG  
 GCAAAATAACACAGAATGGGACTGGCTATGACAGTGTGAACGAAGAGATGCACCCTCTGTTAAACAAAC  
 TGGTGTATGAAAATAAATGGGCTATCTATCCCTAGTGCCTCAGGGGTGAGGAGGTCGCTGACATC  
 CACCAGTACCTCAGATACCCAGAATATCAACAACCTCAGCTCAGAGAAGAACTGCATTATTAACATGAA  
 AATCTACCATCTTTGCCTCCTGTTTGGGAAGCCGCAAGCTAAGTAGGGATGAAGTACAATTTAGGAA  
 CAAAGACCCCATCTCTAAATGGTACCATAATAATCTAGATCCAATGCATAACTATGTAATACAGAGAA  
 TGTAACAGTGCCAGCAAGTGTCTACAAAATAGAATATTCAAGGCGTCGGGACTGTACACCAACAGTCTTT  
 AACTTTGATATCAGACGCCCAAGTTTAGAACACAGGCAGCTTAATTACATACAGTTGACTTGAAGGTG  
 GCAGTACTCTGACAACCTCAGACTCCAAAACGCCTACAACCTCCCTTCCACAAAACCCCTACCAGGCG  
 CACAGAGCTGTATGCCGTGATAGACATCGAGAGAAGTGTCTGTATGTCAAATTTGCAGAAAGCACTGCCA  
 CGAGATGATGGTACATCTAGGAAAACCTAGACACAATAGTACTGATCTGCCCATGTTAGCTGGAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238621 protein sequence  
 Red=Cloning site Green=Tags(s)

MGSCCSCPDKDTPVDNHRNFKFVINVDDDGNELGSGIMELDTELILYTRKRDSVKWHYLCLRRYGYDSN  
 LFSFESGRRRCQTGQGFIFAFKCARAEELFNMLQEIMQNNSINVVEEPVVERNHHQTELEVPRTPRPTTPG  
 FAAQNLPNGYPRYPSFGDASSHPSSRHPSVGSARLPSVGEESTHPLLVAEEQVHTYVNTTGVQEERKNRT  
 SVHVPLEARVSNAESSTPKEEPSSIEDRDPQILLEPEGVKFLVLPVQKQLMEKEKLEQLGRDQVSGSG  
 ANNTEWDTGYDSDERRDAPSVNKLVEENINGLSIPSASGVRRGRLTSTSTSDTQINNSAQRRTALLNVE  
 NLPPLPPWEARKLSRDEDDNLGPKTPSLNGYHNNLDPMHNVNTENVTPASAHKIEYSRRRDCTPTVF  
 NFDIRRPSEHRQLNYIQVDLEGGSDSNPQTPKTPPTPLPQTPTRTEL 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\_001278354

**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\\_001278354.1](#), [NP\\_001265283.1](#)

**RefSeq Size:** 6929 bp

**RefSeq ORF:** 1527 bp

**Locus ID:** 10818

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

**Cytogenetics:** 12q15

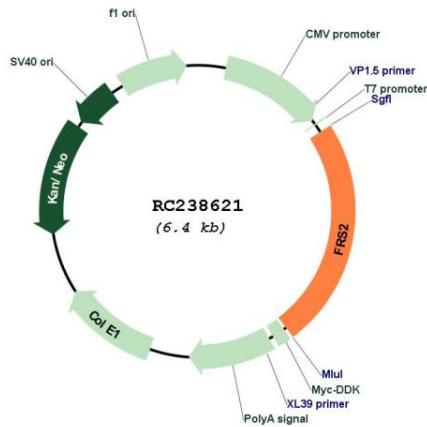
**Protein Families:** Druggable Genome

**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 RC238621