

## Product datasheet for **RG238621**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FRS2 (NM_001278354) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FRS2
Synonyms:	FRS1A; FRS2A; FRS2alpha; SNT; SNT-1; SNT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG238621 representing NM\_001278354.  
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGGTAGCTGTTGTAGCTGTCCAGATAAAGACACTGTCCAGATAACCATCGGAACAAGTTTAAGGTC
ATTAATGTGGATGATGATGGGAATGAGTTAGGTTCTGGCATAATGGAACCTACAGACACAGAAGTATT
TTATACACCCGCAAACGTGACTCAGTAAAATGGCACTACCTCTGCCTGCGACGCTATGGCTATGACTCG
AATCTCTTTTCTTTTGAAGTGGTCAAGGTGTCAAACCTGGACAAGGAATCTTTGCCTTTAAGTGTGCC
CGTGCAGAAGAATTATTTAACATGTTGCAAGAGATTATGCAAAAATAAGTATAAATGTGGTGGAAGAG
CCAGTTGTAGAAAAGAAATAATCATCAGACAGAATTGGAAGTCCCTAGAACACCTCGAACACCTACAAC
CCAGGATTTGCTGCTCAGAACTTACCTAATGGATATCCCCGATATCCCTCATTTGGAGATGCTTCATCC
CATCCGTC AAGCAGACATCCTTCTGTGGGAAGTCTCGCCTGCCTTCAGTAGGGGAAGAATCTACACAT
CCTTTGCTTGTGGCTGAGGAACAAGTACATACCTATGTCAACACTACAGGTGTGCAAGAAGAGCGGAAA
AACCGCACAAGTGTGCATGTTCCATTGGAGGCAAGGGTTCTAACGCTGAAAGCAGCACACCAAAAAGAA
GAACCAAGTAGTATTGAGGACAGGGATCCCTCAGATTCTTCTTGAACCTGAAGGAGTCAAATTTGTTTTA
GGGCCAACCCCTGTTCAAAGCAGTTAATGGAAAAAGAGAAACTGGAGCAACTTGGGAAGAGATCAAGTT
AGTGGAAGTGGAGCAAATAACACAGAATGGGACTGGCTATGACAGTGTGAACGAAGAGATGCACCC
TCTGTTAAACAACTGGTGTATGAAAATATAAATGGGCTATCTATCCCTAGTGCCTCAGGGGTGAGGAGA
GGTCGTCTGACATCCACCACTACCTCAGATACCCAGAATATCAACAACTCAGCTCAGAGAAGAAGTGA
TTATTAACACTATGAAAATCTACCATCTTTGCCTCCTGTTGGGAAGCCCGCAAGCTAAGTAGGGATGAA
GATGACAAATTAGGACCAAAGACCCCATCTCTAAATGGCTACCATAATAATCTAGATCCAATGCATAAC
TATGTAATAACAGAGAATGTAACAGTCCAGCAAGTGTCAACAAAATAGAATATTC AAGGGCTCGGGAC
TGTACACCAACAGTCTTTAACTTTGATATCAGACGCCCAAGTTTAGAACACAGGCAGCTTAATTACATA
CAGGTTGACTTGGGAAGGTGGCAGTACTCTGACAAACCCTCAGACTCCAAAAACGCCTACAACCTCCCTT
CCACAAACCCCTACCAGGCGCACAGAGCTGTATGCCGTGATAGACATCGAGAGAAGTCTGCTATGTCA
AATTTGCAGAAAGCACTGCCACGAGATGATGGTACATCTAGGAAAAGTACACACAATAGTACTGATCTG
CCCATGTTAGCCTGAAA
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTAAAC
  
```

**Protein Sequence:**

>Peptide sequence encoded by RG238621  
 Blue=ORF Red=Cloning site Green=Tag(s)

```

MGSCCSPDKDTPVDNHRNFKVINVDDDGNELGSGIMELTDELILYTRKRDSVKWHYLCRRYGYDS
NLF SFGRRRCQTGGQIFAFKCARAEELFNMLQEIMQNNSINVVEEPVVERNHHQTELEVPRTPRPTT
PGFAAQNL PNGYPRYP SFGDASSHPSSRHPSVGSARLPSVGEESTHPLLVAEEQVHTYVNTTGVQEERK
NRTSVHVPLEARVSNAESSTPKKEEPSSIEDRDPQILLEPEGVKFVLGPTPVQKQLEKEKLEQLGRDQV
SGSGANTEWDTGYDSDERRDAPSVNKL VYENINGL SIPSASGVRGRGLTSTSTSDTQINNSAQRRTA
LLNYENLPSLPPVWEARKL SRDEDDNLGPKTPSLNGYHNNLDPMHNYVNTENVTPASAHKIEYSRRRD
CTPTVFNFDIRRP SLEHRQLNYIQVDLEGGSDSNPQTPKTPPTPLPQTPTRTELYAVIDIERTAAMS
NLQKALPRDDGTSRKTRHNSTDLPLAWK
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
  
```

**Restriction Sites:**

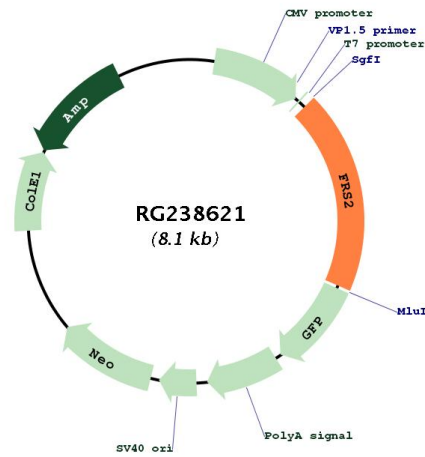
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	NM_001278354
<b>ORF Size:</b>	1536 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>RefSeq:</b>	<a href="#">NM_001278354.1</a> , <a href="#">NP_001265283.1</a>
<b>RefSeq Size:</b>	6929 bp
<b>RefSeq ORF:</b>	1527 bp
<b>Locus ID:</b>	10818
<b>UniProt ID:</b>	<a href="#">Q8WU20</a>
<b>Cytogenetics:</b>	12q15
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Neurotrophin signaling pathway
<b>MW:</b>	57.5 kDa
<b>Gene Summary:</b>	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]