

## Product datasheet for **RG212265**

### S1P (MBTPS1) (NM\_003791) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	S1P (MBTPS1) (NM_003791) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	S1P
Synonyms:	PCSK8; S1P; SEDKF; SKI-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG212265 representing NM_003791 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGCTTGCAACATCTGGCTGCTTCTGCTCGTGGTTTTGCTCTGTGGGAAGAAACATCTGGCGACA  
GACTGGAAAAGAAATCTTTTAAAAGGCCCATGCCCTGGCTGTCCACCTGACTTTGAAGGTGGAATT  
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TCATTTATTTCAAGTGCCTGAAGAGCAGTGAAGTAGACAATTTGAGAATTATACCTCGAAACAATCCAT  
CCAGTGACTACCCTAGTGATTTTGTGGTATTGAGATAAAAAGAAAACAGAAAGCGGGCTGCTAACACT  
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GAGCCAGCCTCTCCCTGGGCTCTGGCTTCTGGCATGCTACGGGAAGGCATTGAGCAGACGGCTGCTGAG  
AGCCATCCCGCGCCAGGTTGCCAGACTGCAGGCAGATGTGCTCTGGCAGATGGGATATACAGGTGCT  
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GAACCAACTGGACCAACGAGCGAACGCTGGACGATGGGTTGGGCCATGGCACATTCGTGGCAGGTGTGAT  
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TCTGCTCAGAGCCTATCAGATCCTCAACAGCTACAAGCCACAGGCAAGTTTGTAGCCCGCTACATAGAT



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CTGACTGAGTGTCCCTACATGTGGCCCTACTGCTCCCAGCCCATCTACTATGGAGGAATGCCGACAGTTG
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GCCGAAGCGGAGGAAGCCAGGGTGAAGCGCCCGCAGCTCATGCAGCAGTTACCCGCCAAAGACCCCT
TCGGTG
    
```

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG212265 representing NM\_003791  
 Red=Cloning site Green=Tags(s)

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MKLVNIWLLLLVLLCGKKHLGDRLEKKSFEKAPCPGCSHLTLKVEFSSTVVEYEVIVAFNGYFTAKARN
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SDPTVPCNETRWSQKWQSSRPLRRASLSLGSFWHATGRHSSRLLRAIPRQVAQTLQADVLWQMGYTG
NVRVAVFDTGLSEKHPHFKNVKERTNWTNERTLDDGLGHGTFVAGVIASMRECQGFAPDAELHIFRVFTN
NQVSYTSWFLDAFNIAILKKIDVLNLSIGGPDFMDHPFVDKVVWELTANNVIMVSAIGNDGPLYGTLNPA
DQMDVIGVGGIDFEDNIARFSSRGMTTWELPGGYGRMKPDIVTYGAGVRGSGVKGCCRALSGTSVASPVV
AGAVTLLVSTVQKRELVNPASMKQALIASARRLPGVNMFQGHGKLDLLRAYQILNSYKPAQLSPSYID
LTECPYMWPYCSQPIYYGMPTVVNVTILNMGVGTGRIVDKPDWQPYLPQNGDNIEVAFSYSSVLWPWSG
YLAISISVTKKAASWEGIAQGHVMITVASPAETESKNGAEQTSTVKLPIKVKIIPTPRSKRVLWDQYHN
LRYPPGYFPRDNLRMKNDPLDWDGHIHTNFRDMYQHLRSMGYFVEVLGAPFTCFDASQYGTLLMVDSEE
EYFPEEIAKLRRVDNGLSLVIFSDWYNTSVMRKVKFYDENTRQWMPDTGGANIPALNELLSVWNMGFS
DGLYEGETLANHDMYYASGCSIAKFPEDGVVITQTFKDQGLEVLKQETAVVENVPILGLYQIPAEGGR
IVLYGDSNCLDDSHRQKDCFLLDALLQYTSYGVTPPSLSHSGNRQRPPSGAGSVTPERMENHLHRYSK
VLEAHLGDPKPRPLPACPRLSWAKPQLNETAPSNLWKHQKLLSIDLDKVVLPNFRSNRPQVRPLSPGES
GAWDIPGGIMPGRYNQEVGQTIIPVFAFLGAMVVLAFFVVQINKAKSRPKRRKPRVKRPQLMQQVHPKPT
SV
    
```

TRTRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_003791

**ORF Size:** 3156 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\\_003791.4](#)

**RefSeq Size:** 4354 bp

**RefSeq ORF:** 3159 bp

**Locus ID:** 8720

UniProt ID: [Q14703](#)

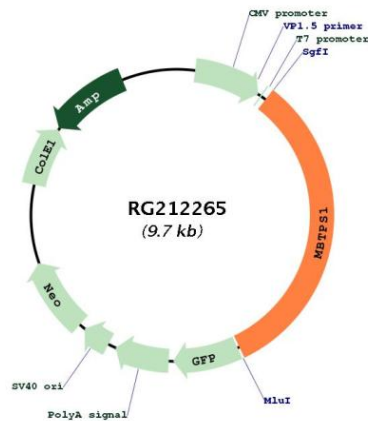
Cytogenetics: 16q23.3-q24.1

Domains: Peptidase\_S8

Protein Families: Druggable Genome, Protease, Transcription Factors, Transmembrane

**Gene Summary:** This gene encodes a member of the subtilisin-like proprotein convertase family, which includes proteases that process protein and peptide precursors trafficking through regulated or constitutive branches of the secretory pathway. The encoded protein undergoes an initial autocatalytic processing event in the ER to generate a heterodimer which exits the ER and sorts to the cis/medial-Golgi where a second autocatalytic event takes place and the catalytic activity is acquired. It encodes a type 1 membrane bound protease which is ubiquitously expressed and regulates cholesterol or lipid homeostasis via cleavage of substrates at non-basic residues. Mutations in this gene may be associated with lysosomal dysfunction. [provided by RefSeq, Feb 2014]

**Product images:**



Circular map for RG212265