

Product datasheet for **RG222359**

TPSG1 (NM_012467) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TPSG1 (NM_012467) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: TPSG1
Synonyms: PRSS31; TMT; trpA
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG222359 representing NM_012467
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCCTGGGGCCTGTGGCCTCCTGCTGCTCCTGGCTGTGCCCGGTGTGTCCCTCAGGACTTTGCAGC
 CAGGGTGTGGCCGGCCGAGTTTCGGATGCAGGCGCCGGATCGTGGGGGTACGCTGCCCGGCCGG
 CGCATGGCCATGGCAGGCCAGCCTCCGCTGCGGAGGATGCACGTGTGCGGCGGGTCACTGCTCAGCCCC
 CAGTGGGTGCTCACAGCTGCCACTGCTTCTCCGGTCCCTGAACATCCGACTACCAGGTGCACCTGG
 GGAAGTGGAGATCACTTTGTCTCCCCTTCTCCACCGTGAGGCAGATCATCTGCCTCCAGCCCTC
 AGGACAGCCGGGACAGCGGGGACATCGCCCTGGTGGAGCTCAGTGTCCCGTGACCCTCTCCAGCCGG
 ATCCTGCCCGTCTGCCTCCCGGAGGCTCAGATGACTTCTGCCCTGGGATCCGGTCTCGGTGACCGGCT
 GGGGCTATACGCGGGAGGGAGAGCCTCTGCCACCCCGTACAGCCTGCGGGAGGTGAAAGTCTCCGTGGT
 GGACACAGAGACCTGCCGCGGGACTATCCCGGCCCGGGGGCAGCATCCTTCAGCCCGACATGCTGTGT
 GCCCGGGGCCCGGGATGCCTGCCAGGACGACTCCGGGGGCCCTCTGGTCTGCCAGGTGAACGGTGCCT
 GGGTGCAGGCTGGCATTGTGAGCTGGGGTGAAGGCTGCGGCCGCCAACAGGCCGGGAGTCTACACTCG
 TGTCCCTGCCTACGTGAAGTGGATCCGCCGCCACATCACAGCATCAGGGGGCTCAGAGTCTGGGTACCC
 AGGCTCCCCCTCCTGGCTGGCTTCTTCTCCCGGCCCTTCTCTGCTAGTCTCCTGTGCTCCTGCTGG
 CCAAGTGCTGCTGCACCCATCTGCGGATGGTACTCCCTCCCGCCCTGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG222359 representing NM_012467
Red=Cloning site Green=Tags(s)

MALGACGLLLLLAVPGVSLRTLQPGCGRPQVSDAGGRIVGGHAAPAGAWPWQASLRRLRRMHVCGGSLLSP
 QWVLTAAHCFSGSLNSSDYQVHLGELEITLSPHFSTVRQIILHSSPSGQPGTSGDIALVELSVPVTLSSR
 ILPVCLPEASDDFCPGIRCSVTGWGYTREGEPLPPYSLREVKVSVDVDETCCRDPYGGGSILQPDMLC
 ARGPGDACQDDSGGPLVCQVNGAWVQAGIVSWGEGCRPNRPGVYTRVPAYVNWIRRHITASGGSESGYP
 RLPLLAGFFLPLGLFLLLVSCLLAKCLLHPSADGTPFPAPD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012467

ORF Size: 963 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_012467.2](#), [NP_036599.2](#)

RefSeq Size: 1124 bp

RefSeq ORF: 966 bp

Locus ID: 25823

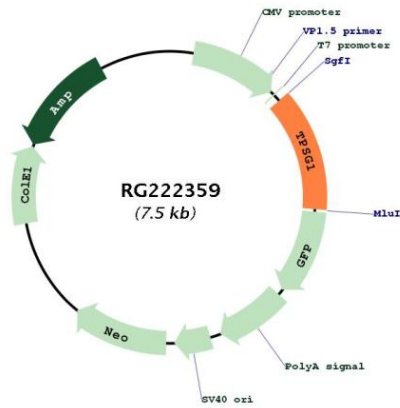
UniProt ID: [Q9NRR2](#)

Cytogenetics: 16p13.3

Protein Families: Druggable Genome, Transmembrane

Gene Summary: Tryptases comprise a family of trypsin-like serine proteases, the peptidase family S1. Tryptases are enzymatically active only as heparin-stabilized tetramers, and they are resistant to all known endogenous proteinase inhibitors. Several tryptase genes are clustered on chromosome 16p13.3. There is uncertainty regarding the number of genes in this cluster. Currently four functional genes - alpha I, beta I, beta II and gamma I - have been identified. And beta I has an allelic variant named alpha II, beta II has an allelic variant beta III, also gamma I has an allelic variant gamma II. Beta tryptases appear to be the main isoenzymes expressed in mast cells; whereas in basophils, alpha-tryptases predominant. This gene differs from other members of the tryptase gene family in that it has C-terminal hydrophobic domain, which may serve as a membrane anchor. Tryptases have been implicated as mediators in the pathogenesis of asthma and other allergic and inflammatory disorders. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG222359