

Product datasheet for **RG202503**

GPSN2 (TECR) (NM_138501) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPSN2 (TECR) (NM_138501) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GPSN2
Synonyms:	GPSN2; MRT14; SC2; TER
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202503 representing NM_138501 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCATTACGAGGTGGAGATTCTGGACGCAAAGACAAGGGAGAAGCTGTGTTTCTTGGACAAGGTGG
AGCCCCACGCCACCATTGCGGAGATCAAGAACCTCTTCACTAAGACCCATCCGCAGTGGTACCCCGCCCG
CCAGTCCCTCCGCTGGACCCCAAGGGCAAGTCCCTGAAGGATGAGGATGTTCTGCAGAAGCTGCCCGTG
GGCACCACGGCCACACTGTACTTCCGGACCTGGGGGCCAGATCAGCTGGGTGACGGTCTTCTCTAACAG
AGTACGCGGGGCCCTTTTCATCTACCTGCTCTTCTACTTCCGAGTGCCCTTCATCTATGGCCACAATA
TGACTTTACGTCCAGTCCGCATACAGTGGTGCACCTCGCCTGCATCTGCTACTCATTCCACTACATCAAG
CGCTGCTGGAGACGCTTTCGTGCACCGCTTCTCCCATGGCACTATGCCTTTGGCAACATCTTCAAGA
ACTGCACCTACTACTGGGGCTTCGCCGCGTGGATGGCCTATTACATCAATCACCTCTCTACACTCCCC
TACCTACGGAGCTCAGCAGGTGAACTGGCGCTCGCCATCTTTGTGATCTGCCAGCTCGGCAACTTCTCC
ATCCACATGGCCCTGCGGGACCTGCGGCCGCTGGGTCCAAGACGCGGAAGATCCCATACCCACCAAGA
ACCCCTCACGTGGCTCTTCTGCTGGTGTCTGCCCAACTACACCTACGAGGTGGGGTCTGGATCGG
TTTCGCCATCATGACGCAGTGTCTCCAGTGGCCCTGTCTCCCTGGTGGGCTTACCCAGATGACCATC
TGGGCCAAGGGCAAGCACCGCAGCTACCTGAAGGAGTTCGGGACTACCCGCCCTGCGCATGCCATCA
TCCCCTTCTGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG202503 representing NM_138501
 Red=Cloning site Green=Tags(s)

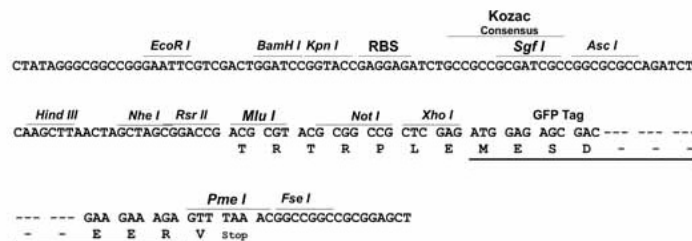
MKHYEVEILDAKTREKLCFLDKVEPHATIAEIKNLFTKTHPQWYPARQSLRLDPKGKSLKDEDVLQKLPV
 GTTATLYFRDLGAQISWTVVFLTEYAGPLFIYLLFYFRVPFIYGHKYDFSSRHTVVHLACICHSFHYIK
 RLLETLFVHRFSHGTMPLRNIFKNCTYYWGF AAWMAYYINHPLYTPPTYGAQQVKLALAI FVICQLGNFS
 IHMALRDLRPAGSKTRKIPYPTKNPFTWLFLLVSCPNTYEVGSWIGFAIMTQCLPVALFSLVGF TQMTI
 WAKGKHRSYLKEFRDYPPLRMPIIPFLL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_138501

ORF Size: 924 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_138501.6](#)

RefSeq Size: 1197 bp

RefSeq ORF: 927 bp

Locus ID: 9524

UniProt ID: [Q9NZ01](#)

Cytogenetics: 19p13.12

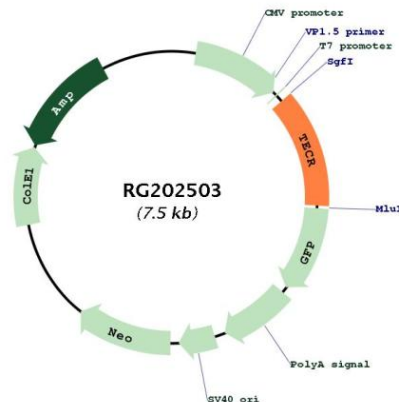
Domains: Steroid_dh

Protein Families: Transmembrane

Protein Pathways: Biosynthesis of unsaturated fatty acids

Gene Summary: This gene encodes a multi-pass membrane protein that resides in the endoplasmic reticulum, and belongs to the steroid 5-alpha reductase family. The elongation of microsomal long and very long chain fatty acid consists of 4 sequential reactions. This protein catalyzes the final step, reducing trans-2,3-enoyl-CoA to saturated acyl-CoA. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Apr 2011]

Product images:



Circular map for RG202503