

Product datasheet for **RG205650**

GPSM2 (NM_013296) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPSM2 (NM_013296) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GPSM2
Synonyms:	CMCS; DFNB82; LGN; PINS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG205650 representing NM_013296
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGAGAGAAGACCATTCTTTTCATGTTCTGTTACAGAATGGAAGCTTCTTGCCTAGAGCTGGCCTTGAAG
 GGGAAACGTCTATGTAAATCAGGAGACTGCCGCGCTGGCGTGTCTTTGAAGCTGCAGTTCAAGTTGG
 AACTGAAGACCTAAAAACACTTAGCGCTATTTACAGCCAGTTGGGCAATGCTTATTTCTATTGTCATGAT
 TATGCCAAAGCATTAGAATATCACCATCATGATTTAACCTTGCAAGGACTATTGGAGACCAGCTGGGGG
 AAGCGAAAGCTAGTGGTAATCTGGGAAACACCTTAAAGTTCTTGGGAATTTGACGAAGCCATAGTTTG
 TTGTCAGCGACACCTAGATATTTCCAGAGAGCTTAATGACAAGGTGGGAGAAGCAAGAGCACTTTACAAT
 CTTGGGAATGTGTATCATGCCAAAGGAAAAAGTTTGGTTGCCCTGGTCCCAGGATGTAGGAGAATTTTC
 CAGAAGAAGTGAGAGATGCTCTGCAGGCAGCCGTGGATTTTTATGAGGAAAACCTATCATTAGTGACTGC
 TTTGGGTGACCGAGCGGCACAAGGACGTGCCTTTGGAATCTTGGAAACACACATTACCTCCTTGGCAAC
 TTCAGGGATGCAGTTATAGCTCATGAGCAGCGTCTCCTTATTGCAAAAAGAAATTTGGAGATAAAGCAGCTG
 AAAGAAGAGCATATAGCAACCTTGGAAATGCATATATATTTCTTGGTGAATTTGAAACTGCCTCGGAATA
 CTACAAGAAGACACTACTGTTGGCCGACAGCTTAAAGACCGAGCTGTAGAAGCACAGTCTTGTTACAGT
 CTTGGAATACATATACTTTACTTCAAGACTATGAAAAGGCCATTGATTATCATCTGAAGCACTTAGCAA
 TTGCTCAAGAGCTGAATGATAGAATTGGTGAAGGAAGAGCATGTTGGAGCTTAGGAAATGCATACACAGC
 ACTAGGAAATCATGATCAAGCAATGCATTTTGTGAAAAGCACTTGGAAATTTCAAGAGAGGTTGGGGAT
 AAAAGTGGTGAATAACAGCACGACTTAATCTCTCAGACCTTCAAATGGTTCTTGGTCTGAGCTACAGCA
 CAAATAACTCCATAATGTCTGAAAATACTGAAATTGATAGCAGTTTGAATGGTGTACGCCCAAGTTGGG
 ACGCCGGCATAGTATGGAAAATATGGAACCTTATGAAGTTAACACCAGAAAAGGTACAGAAGTGAACAGT
 GAAATTTCTTGCTAAGCAAAAACCTCTTATTGCCAAACCTTCTGCAAAGCTACTCTTTGTCAACAGACTGA
 AGGGGAAAAAATACAAAACGAATTCCTCCACTAAAGTTCTCCAAGATGCCAGTAATTCTATTGACCACCG
 AATTCCAAATTCAGAGGAAAAATCAGTGCAGATACTATTGGAGATGAAGGGTCTTTGACTTATTAAGC
 CGATTTCAAAGCAATAGGATGGATGATCAGAGATGTTGCTTACAAGAAAAGAACTGCCATACAGCTTCAA
 CAACAACCTCTTCCACTCCCCCTAAAATGATGCTAAAAACATCATCTGTTCTGTGGTATCCCCAACAC
 GGATGAGTTTTTAGATCTTCTTGCCAGCTCACAGAGTCGCCGTCTGGATGACCAGAGGGCTAGTTTCAGT
 AATTTGCCAGGGCTTCGTCTAACACAAAACAGCCAGTCGGTACTTAGCCACCTGATGACTAATGACAACA
 AAGAGGCTGATGAAGATTTCTTTGACATCCTTGTAAAATGTCAAGGATCCAGATTAGATGATCAAAGATG
 TGCTCCACCACCTGCTACCACAAAGGTCGACAGTACCAGATGAAGACTTTTTTCAGCCTTATTTTACGG
 TCCCAGGGAAAGAGAATGGATGAACAGAGAGTTCTTTTACAAAGAGATCAAAACAGAGACACTGACTTTG
 GGCTAAAGGACTTTTGTCAAAATAATGCTTTGTTGGAGTTTAAAAATTCAGGGAAAAATTCGGCAGACCA
 T

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG205650 representing NM_013296
Red=Cloning site Green=Tags(s)

MREDHSFHVRYRMEASCLELALAGERLCKSGDCRAGVSFFFAAVQVGTEDLKTLSAIYSQLGNAYFYLHD
YAKALEYHHHDLTLARTIGDQLGEAKASGNLGNLKVGNFDEAIVCCQRHLDISRELNDKVGEARALYN
LGNVYHAKGKSGCPGPQDVGEFPEEVRDALQAAVDFFEENLSLVTALGDRAAQGRAFGNLGNTHYLLGN
FRDAVIAHEQRLLIAKEFGDKAAERRAYSNLGNAYIFLGEFETASEYKKTLLLARQLKDRAVEAQSCYS
LGNTYTLQLQDYEKADYHLKHLAIAQELNDRIGEGRACWSLGNAYTALGNHDQAMHFAEKHLEISREVG
KSGELTARLNLSDLQMLGLSYSTNNSIMSENTEIDSSLNGVRPKLGRRHSMENMELMKLTPEKVQNWNS
EILAKQKPLIAKPSAKLLFVNRLKGKKTNSSTKVLQDASNSIDHRIPNSQRKISADTIGDEGFFDLLS
RFQSNRMDQRCCLQEKNCHTASTTTSTPPKMKLTSSVPVSPNTDEFLDLLASSQSRRLDDQRASFS
NLPGLRLTQNSQSVLSHLMTNDNKEADEDFDILVKCQGSRLDDQRCAPPPATTGPTVPDEDFSLILR
SQGKRMDQVRLLQRDQNRDQDFGLKDFLQNNALLEFKNSGKKSADH

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_013296

ORF Size: 2031 bp

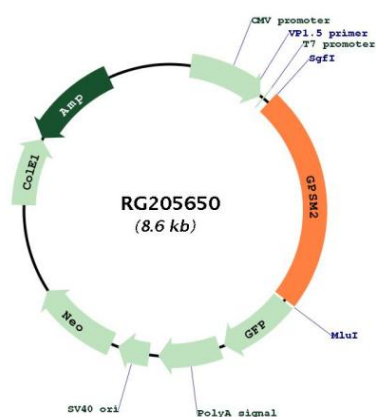
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_013296.3, NP_037428.2</u>
RefSeq Size:	3039 bp
RefSeq ORF:	2055 bp
Locus ID:	29899
UniProt ID:	<u>P81274</u>
Cytogenetics:	1p13.3
Domains:	TPR, GoLoco
Protein Families:	Druggable Genome
Gene Summary:	The protein encoded by this gene belongs to a family of proteins that modulate activation of G proteins, which transduce extracellular signals received by cell surface receptors into integrated cellular responses. The N-terminal half of this protein contains 10 copies of leu-gly-asn (LGN) repeat, and the C-terminal half contains 4 GoLoco motifs, which are involved in guanine nucleotide exchange. This protein may play a role in neuroblast division and in the development of normal hearing. Mutations in this gene are associated with autosomal recessive nonsyndromic deafness (DFNB82). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

Product images:



Circular map for RG205650