

Product datasheet for **RC205650**

GPSM2 (NM_013296) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPSM2 (NM_013296) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GPSM2
Synonyms:	CMCS; DFNB82; LGN; PINS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC205650 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGAGAAGACCATTCTTTTCATGTTCTGTTACAGAATGGAAGCTTCTTGCCCTAGAGCTGGCCTTGAAG
 GGAACGTCTATGTAATCAGGAGACTGCCGCGCTGGCGTGTATTCTTTGAAGCTGCAGTTCAAGTTGG
 AACTGAAGACCTAAAAACACTTAGCGCTATTTACAGCCAGTTGGGCAATGCTTATTTCTATTTGCATGAT
 TATGCCAAAGCATTAGAATATCACCATCATGATTTAACCCCTGCAAGGACTATTGGAGACCAGCTGGGGG
 AAGCGAAAGCTAGTGGTAATCTGGGAAACACCTTAAAAGTTCTTGGGAATTTTGACGAAGCCATAGTTTG
 TTGTCAGCGACACCTAGATATTTCCAGAGAGCTTAATGACAAGGTGGGAGAAGCAAGAGCACTTTACAAT
 CTTGGGAATGTGATCATGCCAAAGGGAAAAGTTTGGTTGCCCTGGTCCCAGGATGTAGGAGAATTTTC
 CAGAAGAAGTGAGAGATGCTCTGCAGGCAGCCGTGGATTTTTATGAGGAAAACCTATCATTAGTGACTGC
 TTTGGGTGACCGAGCGGCACAAGGACGTGCCTTTGGAAATCTTGGAAACACACATTACCTCCTTGGCAAC
 TTCAGGGATGCAGTTATAGCTCATGAGCAGCGTCTCCTTATTGCAAAAAGAATTTGGAGATAAAGCAGCTG
 AAAGAAGAGCATATAGCAACCTTGGAAATGCATATATATTTCTTGGTGAATTTGAAACTGCCTCGGAATA
 CTAACAAGAAGACACTACTGTTGGCCCGACAGCTTAAAGACCGAGCTGTAGAAGCACAGTCTTGTACAGT
 CTTGGAATACATATACTTTACTTCAAGACTATGAAAAGGCCATTGATTATCATCTGAAGCACTTAGCAA
 TTGCTCAAGAGCTGAATGATAGAATTGGTGAAGGAAGAGCATGTTGGAGCTTAGGAAATGCATACACAGC
 ACTAGGAAATCATGATCAAGCAATGCATTTTGTGAAAAGCACTTGGAAATTTCAAGAGAGGTTGGGGAT
 AAAAGTGGTGAACAAACAGCAGCACTTAATCTCTCAGACCTTCAAATGGTCTTGGTCTGAGCTACAGCA
 CAAATAACTCCATAATGTCTGAAAATACTGAAATTTGATAGCAGTTTGAATGGTGTACGCCCAAGTTGGG
 ACGCCCGCATAGTATGGAAAATATGGAACCTTATGAAGTTAACACCAGAAAAGGTACAGAACTGGAACAGT
 GAAATCTTGCTAAGCAAAAACCTCTTATTGCCAAACCTTCTGCAAAGCTACTCTTTGTCAACAGACTGA
 AGGGGAAAAAATACAAAACGAATTCCTCCACTAAAGTTCTCCAAGATGCCAGTAATTCTATTGACCACCG
 AATTCCAAATCTCAGAGGAAAAATCAGTGCAGATACTATTGGAGATGAAGGGTCTTTGACTTATTAAGC
 CGATTTCAAAGCAATAGGATGGATGATCAGAGATGTTGCTTACAAGAAAAGAAGTCCATACAGCTTCAA
 CAACAACCTCTTCCACTCCCCCTAAAATGATGCTAAAACATCATCTGTTCTGTGGTATCCCCAACAC
 GGATGAGTTTTTAGATCTTCTTGCCAGCTCACAGAGTCGCCGTCTGGATGACCAGAGGGCTAGTTTCAGT
 AATTTGCCAGGGCTTCGTCTAACACAAAACAGCCAGTCGGTACTTAGCCACCTGATGACTAATGACAACA
 AAGAGGCTGATGAAGATTTCTTTGACATCCTTGTAAAATGTCAAGGATCCAGATTAGATGATCAAAGATG
 TGCTCCACCACCTGCTACCACAAAAGGTCGACAGTACCAGATGAAGACTTTTTTCAGCCTTATTTTACGG
 TCCCAGGGAAAGAGAATGGATGAACAGAGAGTTCTTTTACAAGAGATCAAAACAGAGACTGACTTTG
 GGCTAAAGGACTTTTTGCAAAAATATGCTTTGTTGGAGTTTAAAATTCAGGGAAAAATTCGGCAGACCA
 T

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205650 protein sequence
Red=Cloning site Green=Tags(s)

MREDHSFHVRYRMEASCLELALAGERLCKSGDCRAGVSFFFAAVQVGTEDLKTLSAIYSQLGNAYFYLHD
YAKALEYHHHDL TLARTIGDQLGEAKASGNLGNLTKVLGNFDEAIVCCQRHLDISRELNKVGEARALYN
LGNVYHAKGKSGFCPPQDVGEFPPEEVRDALQAAVDFYEENLSLVTALGDRAAQGRAFGNLGNTHYLLGN
FRDAVIAHEQRLLIAKEFGDKAAERRAYSNLGNAYIFLGEFETASEYYKTLLLARQLKDRAVEAQSCYS
LGNTYTLLQDYEKAIDYHLKHLAIAQELNDRIGEGRACWSLGNAYTALGNHDQAMHFAEKHLEISREVD
KSGELTARLNLSDLQMVGLSYSTNNSIMSENTEIDSSLNGVRPKLRRRHSMENMELMKLTPEKVQNWNS
EILAKQKPLIAKPSAKLLFVNRLKGKKYKTNSSSTKVLQDASNSIDHRIPNSQRKISADTIGDEGFFDLLS
RFQSNRMDQRCCLQEKNCHTASTTTSTPPKMLKTSSVPVSPNTDEFLLDASSQSRRLDDQRASF
NLPGLRLTQNSQSVLSHLMTNDNKEADEDFFDILVKCQGSRLDDQRCAPPPATTKGPTVPDEDFSLILR
SQGKRMDQVRLLQRDQNRDQDFGLKDFLQNNALLEFKNSGKKSADH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6258_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013296

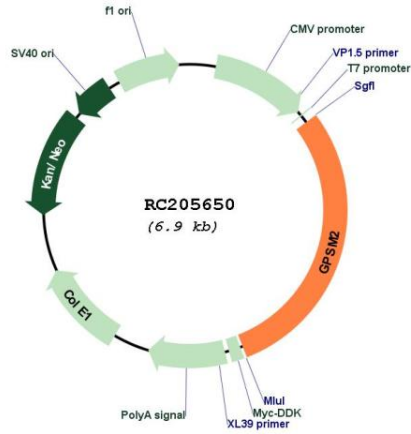
ORF Size: 2031 bp

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](#)

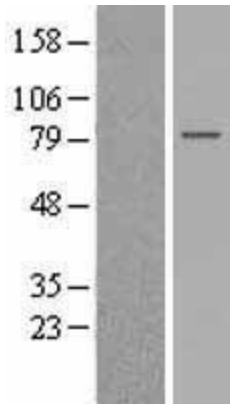
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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:	<u>NM_013296.3</u> , <u>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
MW:	75.8 kDa
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]

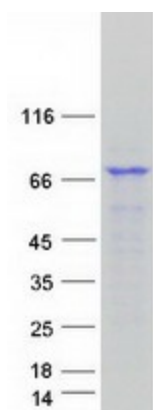
Product images:



Circular map for RC205650



Western blot validation of overexpression lysate (Cat# [LY415680]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205650 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GPSM2 protein (Cat# [TP305650]). The protein was produced from HEK293T cells transfected with GPSM2 cDNA clone (Cat# RC205650) using MegaTran 2.0 (Cat# [TT210002]).