

Product datasheet for **SC111910**

GPSM2 (NM_013296) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPSM2 (NM_013296) Human Untagged Clone
Tag:	Tag Free
Symbol:	GPSM2
Synonyms:	CMCS; DFNB82; LGN; PINS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC111910 sequence for NM_013296 edited (data generated by NextGen Sequencing)

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ATGGAGGAAAAATTTGATAAGCATGAGAGAAGACCATTCTTTTCATGTTTCGTTACAGAATG
GAAGCTTCTTGCCTAGAGCTGGCCTTGGAAAGGGGAACGTCTATGTAAATCAGGAGACTGC
CGCGCTGGCGTGTCAATCTTTGAAGCTGCAGTTCAAGTTGGAAGTGAAGACCTAAAAACA
CTTAGCGCTATTTACAGCCAGTTGGGCAATGCTTATTTCTATTTGCATGATTATGCCAAA
GCATTAGAATATCACCATCATGATTTAACCCCTTGAAGGACTATTGGAGACCAGCTGGGG
GAAGCGAAAGCTAGTGGTAACTCTGGGAAACACCTTAAAAGTTCTTGGGAATTTTGACGAA
GCCATAGTTTGTGTGTCAGCGACACCTAGATATTTCCAGAGAGCTTAATGACAAGGTGGGA
GAAGCAAGAGCACTTTACAATCTTGGGAATGTGTATCATGCCAAAGGGAAAAAGTTTTGGT
TGCCCTGGTCCCCAGGATGTAGGAGAATTTCCAGAAGAAGTGAAGAGATGCTCTGCAGGCA
GCCGTGGATTTTTATGAGGAAAACCTATCATTAGTGACTGCTTTGGGTGACCGAGCGGCA
CAAGGACGTGCCTTTGAAAATCTTGGAAACACACATTACCTCCTTGGCACTTCAGGGAT
GCAGTTATAGCTCATGAGCAGCGTCTCCTTATTGCAAAAAGAAATTTGGAGATAAAGCAGCT
GAAAGAAGAGCATATAGCAACCTTGGAAATGCATATATATTTCTTGGTGAATTTGAAACT
GCCTCGGAATACTACAAGAAGACACTACTGTTGGCCCGACAGCTTAAAGACCGAGCTGTA
GAAGCACAGTCTTGTACAGTCTTGGAAATACATATACTTTACTTCAAGACTATGAAAAG
GCCATTGATTATCATCTGAAGCACTTAGCAATTGCTCAAGAGCTGAATGATAGAATTGGT
GAAGGAAGAGCATGTTGGAGCTTAGGAAATGCATACACAGCACTAGGAAATCATGATCAA
GCAATGCATTTTGTGAAAAGCACTTGGAAATTTCAAGAGAGGTTGGGGATAAAAGTGGT
GAACTAACAGCACGACTTAATCTCTCAGACCTTCAAATGGTCTTGGTCTGAGCTACAGC
ACAATAACTCCATAATGTCTGAAAATACTGAAATTTGATAGCAGTTTGAATGGTGTACGC
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ACAACAACNNNTCCACTCCCCATAAAATGATGCTAAAAACATCATCTGTTCTGTGGTA
TCCCCAACACGGATGAGTTTTTAGATCTTCTTCCAGCTCACAGAGTCGCCGTCTGGAT
GACCAGAGGGCTAGTTTCAGTAATTTGCCAGGGCTTCGTCTAACACAAAACAGCCAGTCG
GTACTTAGCCACCTGATGACTAATGACAACAAAGAGGCTGATGAAGATTTCTTTGACATC
CTTGTAATAATGTCAAGGATCCAGATTAGATGATCAAAGATGTGCTCCACCACCTGTACC
ACAAAGGGTCCGACAGTACCAGATGAAGACTTTTTTCAGCCTATTTTACGGTCCCAGGGA
AAGAGAAATGGATGAACAGAGAGTTCTTTTACAAAGAGATCAAAAACAGAGACACTGACTTT
GGGCTAAAGGACTTTTTGCAAAAATATGCTTTGTTGGAGTTTAAAAATTCAGGGAAAAAA
TCGGCAGACCATTAG
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Clone variation with respect to NM_013296.4

1569 t=>n;1570 t=>n;1571 c=>n

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_013296 unedited
 GGATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGCGCGCCGGC
 CTCCTGCGGTGCCCTGCCTTGGGGAGGGGCGGTGACCACCCGTCTGTCGCCGAGGCGG
 CCGCCGCTGCACCTTACC CGGTACCCGGGACCCGCCCGCCGCGGGAGCTTATAATATG
 ACTCGATGGAGGAAAATTTGATAAGCATGAGAGAAGACCATTCTTTTCATGTTTCGTTACA
 GAATGGAAGCTTCTTGCCTAGAGCTGGCCTTGGAAAGGGAACTGCTATGTAATCAGGAG
 ACTGCCGCGTGGCGTGCATTCTTTGAAGCTGCAGTTCAAGTTGGAAGTGAAGACCTAA
 AAACACTTAGCGCTATTTACAGCCAGTTGGGCAATGCTTATTTCTATTTGCATGATTATG
 CCAAAGCATTAGAAATACACCATCATGATTTAACCCCTTGCAAGGACTATTGGAGACCAGC
 TGGGGGAAGCGAAAGCTAGTGGTAATCTGGGAAACACCTTAAAAGTTCTTGGGAATTTTG
 ACGAAGCCATAGTTTGTGTCAGCGACACCTAGATATTTCCAGAGAGCTTAATGACAAGG
 TGGGAGAAGCAAGAGCACTTTACAATCTTGGGAATGTGTATCATGCCAAAGGGAAAAGTT
 TTGTTGCCCTGGTCCCCAGGATGTAGGAGAATTTCCAGAAGAGTGAGAGATGCTCTGCA
 NGCAGCCGTGGATTTTTATGAGGAAAACCTATCATTAGTACTGCTTTGGGTGACCGAGC
 GGCACAAGGACGTGCCTTTGAAATCTTGAACACACATTACCTNCTTGGNNCACTCAGG
 NATGCANGTATAGCTCATGAGCAGCGTCTCCTTATTGCAAAGAATTTGGAGATNAAGCA
 GCTGAAAGAAGAGCATATAACACCCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_013296 unedited
 GGGGGGGGGGGGTTTAAANNNGTTTTNTNNNNNNNNGNNGTTGGCTATTTTTATCAC
 TTTTTTNCATTGNTNCAAGTACATTATTTTTACCAAACCAACATTGTTTCCCACTACATC
 CATGGTTATGTATAAAAAACCGCATTGTCAATTAAGATGTTAAAAAATTTTCCATAA
 GAGTATTA AATTCTAATCTATGATTCACCTAACTTCTACTTTATAAACACTAGGTAAG
 TAATCTCACAAGCTGCCAAGAACACATCCCAAGCAGTAATCACAGACGATGAAGCACCT
 TACAGGACCCCTCCACCCTCAAACGCGCATGTCCAGAGAAGTATTAATGCCTTAATAGAC
 TACTGAAGGTTAACTATTTACATCATTCTAAAAATATTTTAAAGCTGTATTACAGTGTAT
 AAATTCCTCTTTTAAAGGAAAAAGTAATAGATTGTTTCCCTTACCGTGTGAAAGGAAAA
 AAAATAAATCCATAGTAACTAATGGTCTGCCGATTTTTCCCTGAATTTTAACTCCAA
 CAAAGCATTATTTGCAAAAAGTCCTTTAGCCCAAAGTCAGTGTCTCTGTTTTGATCTCT
 TTGTAAAAGAACTCTCTGTTTCATCCATTCTTTCCCTGGGACCGTAAAATAAGGCTGAA
 AAAGTCTTCATCTGGTACTGTGCGACCCCTTTGTGGTAGCAGGTGGTGGAGCACATCTTGT
 ATCATCTAATCTGGATCCTTGACATTTTACAAGGATGTCAAAGAAATCTTCATCAGCCTC
 TTTGTTGTCATTAGTCATCAGGTGGCTAAGTACCGACTGGCTGTTTTGTGTTAGACGAAG
 CCCTGGCAAATTAAGTAACTAGCCCTCTGGTCATCCAGACGGCGACTCTGTGAGCTGGC
 AGAAGATCTAAAACCTCATNCGTGTGGGGGATACCACAG

Restriction Sites:

NotI-NotI

ACCN:

NM_013296

Insert Size:

3080 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_013296.3](#), [NP_037428.2](#)

RefSeq Size: 2806 bp

RefSeq ORF: 2034 bp

Locus ID: 29899

UniProt ID: [P81274](#)

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]