

Product datasheet for **RR200162**

Gpsm1 (NM_144745) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gpsm1 (NM_144745) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gpsm1
Synonyms:	Ags3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RR200162 representing NM_144745
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGAGCCCGCCCGCCCGCGGCCGAGGAGCTCCCGGCCAGCCGCCAGGCGCCTCTACTCCAGGA
 TGGAGGCCTCCTGTCTGGAGCTGGCACTGGAAGGTGAGCGGTGTGCAAGCGGGGACTTCAAGGCAGG
 TGTGGCCTTCTTTGAGGCTGCCGTGCAGGTGGCACTGAGGACCTGAAGCACTGAGTGCTATCTACAGC
 CAGCTGGGCAATGCCTACTTCTACCTGAAGGAGTATGCCAGGGCCCTGCAGTTCCACAAACATGACTTGC
 TGCTGGCAGGACCATTGGCGACCGCATGGGGGAAGCCAAGGCCAGTGGGAACCTGGGCAACACACTCAA
 GGTCTGGGCCGATTTCGATGAGGCAATTGTCTGTTGCCAGCGACACTTGGACATTGCCAGGAGCAGGGG
 GACAAGGTTGGGAAGCGAGAGCACTCTACAACATTGAAATGTGTACCATGCCAAGGGCAAACAGCTAT
 CCTGGAACGCTGCACAGGACCCTGGGCACCTGCCACCTGATGTCCGTGAGACACTGCACAGGGCCTCTGA
 GTTCTATGAGAGGAACCTGTCTTGGTGAAGGAGCTAGGGGATCGGGCAGCCAGGGCAGAGCCTATGGC
 AACCTGGGTAACACCCACTACCTGCTGGGGAATTCACAGAAGCTACAACCTTCCACAAAGAGCGCCTGG
 CCATTGCTAAGGAGTTTGAGACAAAGCAGCTGAGAGGAGAGCCTACAGCAACTTGGGCAATGCTCACAT
 CTTCCTGGGGCGCTTTGATGTGGCTGCTGAACATTACAAGAAGACGCTGCAGCTGTCTCGGCAGCTCCGG
 GACCAGGCCGTGGAAGCACAGGCTTGTACAGTCTGGGGAACACCTACACACTGCTGCAGGACTACGAGC
 GGGCTGCTGAGTACCACCTGCGGCACCTTGTCAATGCCAGGAGCTGGCTGATAGGGTGGGAGAGGGCCG
 AGCTTGTGGAGCCTGGGGAACGCTACGTGTCCATGGGAGCCCCGCACAGGCCTTGACCTTTGCCAAA
 AAACATCTGCAGATCTCCAGGAGATTGGAGACCGAAATGGAGAGCTCACGGCCCGCATGAATATTGCTC
 ACCTGCAGCTGGCACTGGGCCGGCTGACTAGCCCTGCGGCGCAGAGAAGCCAGATCTGGCTGGCTATGA
 GGCAACAAGGAGCAAGACCCAAAAGGACACAGAGGCTGAGTGCGGAGACCTGGGACCTGCTGCGGCTCCCC
 CTGGACCGGGAGCAAAATGGAGAGACCCACCACAGGGGACTGGAGGGTCCAAGCAGGGACTCGCTTC
 CTCTCCCATGAGGAGCAGGAAGTACCAGGAAGGTCCAGATGCCATTGAGAGGAGACCCCGGAGGGTAG
 CCACTCTCACTGGACAGTGCTGATGTAAGGGTACAGGTGCCTCGCACGGGTATCCCCAGGGCCCGTCC
 TCTGACGAGGAGTGTCTTCTCGATCTGCTGAGTAAAGTCCAGAGCAGTCGATGGATGACCAACGCTGTC
 CCCTGGAGGAAGGCCAGGCTGGGCTGCTGAGGCTACAGCTGCCCAACCCTGGAGGAGAGAGCGGCTCA
 GCCCTCTGTAACAGCTTACCACAGACTGAAGAGTTCTTTGACCTCATTGCCAGCTCCAGAGCCGCGG
 CTGGATGACCAGAGGGCTAGCGTAGGCAGCCTGCCTGGGCTTCGCATCACCTCAACAACGTGGGGCACC
 TCCGAGGCGACGGGACCCAGGAGCCAGGGGATGAGTTTTTCAACATGCTTATCAAATACCAGTCTC
 CAGGATTGATGACCAGCGCTGTCCACCCCTGATGTGCTGCCCGAGGCCCCACCATGCCTGATGAGGAT
 TTCTTCAGCCTTATCCAGAGGATGACGGCTAAGCGGATGGATGAGCAGCGTGTGGACCTGGCTGGGAGTC
 CAGACCAAGAGCCAGTGGGCTGCCTGATCCCCGCAGCAATGTCCGCCAGGTGCCAGC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR200162 representing NM_144745
Red=Cloning site Green=Tags(s)

```

MASPAPPAEEELPGPAARRLYSRMEASCLELALAGERLCKAGDFKAGVAFFFAAVQVGTEDLKTLSAIYS
QLGNAYFYLYKEYARALQFHKHDLLLARTIGDRMGEAKASGNLGNLTKVLGRFDEAIVCCQRHLDIAEQG
DKVGEARALYINIGNVYHAKGKQLSWNAAQDPGHLPPDVRETLHRASEFYERNLSLVKELGDRAAQGRAYG
NLGNTHYLLGNFTEATTFHKERLAIKEFGDKAAERRAYSNLGNAHIFLGRFDVAAEHYKKTQLSRQLR
DQAVEAQACYSLGNITYLLQDYERAAEYHLRHLVIAQELADRVGEGRACWSLGNAYVSMGSPAQALTFK
KHLQISQEI GDRNGELTARMNIAHLQLALGRLTSPAAAEPDLAGYE AQGARP KRTQRLSAETWDLRLRP
LDREQNGETHHTGDWRGSRDLSPLPMRSRKYQEGPDAIERRPREGSHSPLDSADVRVQVPRTGIPRAPS
SDEECFFDLLSKFQSSRMDQRCPL EEGQAGAAEATAAPTLEERAAQPSVTASPQTEEFFDLIASSQSRR
LDDQRASVGSPLGLRITLNNVGHRLRGDGPQEPGDEFFNMLIKYQSSRIDDQRCPPDPVLP RGPMPDED
FFSLIQRVQAKRMDEQRVDLAGSPDQEASGLPDP RQCCPPGAS
  
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_144745

ORF Size: 2019 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_144745.2](#), [NP_653346.2](#)

RefSeq Size: 3425 bp

RefSeq ORF: 2022 bp

Locus ID: 246254

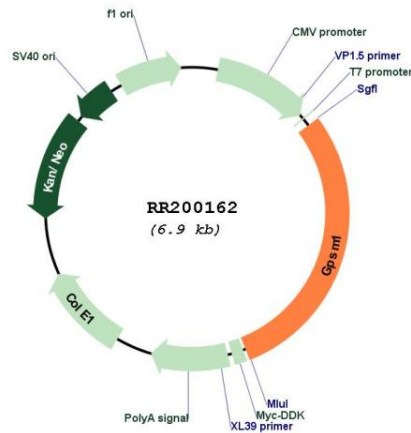
UniProt ID: [Q9R080](#)

Cytogenetics: 3p13

MW: 74.4 kDa

Gene Summary: Guanine nucleotide dissociation inhibitor (GDI) which functions as a receptor-independent activator of heterotrimeric G-protein signaling. Keeps G(i/o) alpha subunit in its GDP-bound form thus uncoupling heterotrimeric G-proteins signaling from G protein-coupled receptors. Controls spindle orientation and asymmetric cell fate of cerebral cortical progenitors. May also be involved in macroautophagy in intestinal cells. May play a role in drug addiction. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR200162