

Product datasheet for **MR205863**

Gna13 (NM_010303) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gna13 (NM_010303) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gna13
Synonyms:	AU024132; AU043124; Galpha13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205863 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGACTTCCTGCCGTCGCGCTCCGTGCTGTCCGTGTGCTTCCCGGGCTGCGTGCTGACGAACGGCG
AGGCCGAGCAGCAGCGCAAGTCCAAGGAGATCGACAAATGCCTGTCGCGGGAGAAGACCTACGTGAAGCG
GCTGGTGAAGATCCCGTCTGGCGCGGGCGAGAGCGGCAAGTCCACCTTCTGAAGCAGATGCGGATC
ATCCACGGCCAGGACTTCGACCAGCGCGCGCGAGGAGTCCGCCCCACCATCTACAGCAACGTGATCA
AAGGTATGAGGGTCTGGTAGATGCCCGAGAGAAGCTTCATATTCCTGGGGAGATAACAAAACCAGCT
CCATGGAGACAAGTTGATGGCATTGATACCCGCGCCCATGGCTGCCAGGGGATGGTGGAGACTCGA
GTGTTCTGCAGTATCTTCTGCTATCAGAGCCTTATGGGAGGACAGTGGTATACAGAATGCCTACGATC
GGCGCCGGGAATTCAGCTGGGTGAGTCTGTAAAGTATTTCTGGATAAATTGGATAAACTGGAGTACC
GGATTACATTCATCACAGCAAGATATCCTGCTTGCCAGAAGGCCACCAAGGCATCCATGAGTACGAC
TTTGAATTAATAATGTTCTTTCAAATGGTTGATGTAGGTGGCCAGAGATCAGAACGGAAACGCTGGT
TTGAATGCTTTGACAGTGTGACGTCGATACTTTCTTGTCTCTCAAGTGAATTTGACCAGGTGCTTAT
GGAGGACCGCCAGACCAATCGCCTTACAGAATCTCTGAACATTTTGAACAATTTGCAACAATCGGGTT
TTCAGCAACGCTCCATAATCCTCTTAAACAAGACAGACTGCTCGAGGAGAAAGTCAAGTTGTTA
GCATCAAAGACTATTTCTAGAATTTGAAGGGGACCCCACTGCTTAAGAGACGTCCAAAAGTTTCTGGT
GGAATGCTTCCGGGGAAACGCCGGGACCAGCAGCAGAGGCCGTTGTACCACCACTTACCACCGCGATC
AACACAGAGAACATCCGCTCGTGTCCGGGACGTGAAGGACACGATCCTTCATGACAACCTGAAGCAGC
TCATGCTGCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >MR205863 protein sequence
 Red=Cloning site Green=Tags(s)

MADFLPSRSVLSVCFPGCVLTNGEAEQQRKSKEIDKCLSREKTYVKRLVKIPLLGAGESGKSTFLKQMRI
 IHGQDFDQARAREEFRPTIYSNVIKGMRVLVDAREKLHIPWGDNKNQLHGDKLMAFDTRAPMAAQGMVETR
 VFLQYLPAIRALWEDSGIQNAYDRRREFQLGESVKYFLDNLDKLGVPDYIPSQQDILLARRPTKGIHEYD
 FEIKNVPFKMVDVGGQRSEKRWFEFCFDSVTSILFLVSSSEFDQVLMEDRQTNRLTESLNIFETIVNVRV
 FSNVSIILFLNKDLDLLEEKVQVVSISKDYFLEFEGDPHCLRDVQKFLVECFRGRKRRDQQQRPLYHHFTTAI
 NTENIRLVFRDVKDILHDNLKQLMLQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_010303

ORF Size: 1134 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_010303.2](#)

RefSeq Size: 6217 bp

RefSeq ORF: 1134 bp

Locus ID: 14674

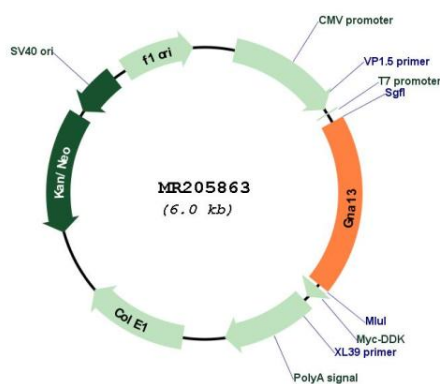
UniProt ID: [P27601](#)

Cytogenetics: 11 71.88 cM

MW: 44 kDa

Gene Summary: Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems (PubMed:21212405, PubMed:19151758, PubMed:16388592). Activates effector molecule RhoA by binding and activating RhoGEFs (ARHGEF1/p115RhoGEF, ARHGEF11/PDZ-RhoGEF and ARHGEF12/LARG) (PubMed:16388592). GNA13-dependent Rho signaling subsequently regulates transcription factor AP-1 (activating protein-1) (PubMed:19151758, PubMed:21212405). Promotes tumor cell invasion and metastasis by activating Rho/ROCK signaling pathway (By similarity). Inhibits CDH1-mediated cell adhesion in process independent from Rho activation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR205863