

Product datasheet for **RR208034**

Gna13 (NM_001013119) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Gna13 (NM_001013119) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Gna13
Synonyms: Galpha13
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RR208034 representing NM_001013119
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGACTTCCTGCCGTCGCGCTCCGTGCTGTCCGTGTGCTTCCCGGGCTGCGTGCTGACGAACGGCG
AGGCCGAGCAGCAGCGCAAGTCCAAGGAGATCGACAAATGCCTGTGCGGGGAGAAGACCTACGTGAAGCG
GCTGGTGAAGATCCTGCTGCTGGCGCGGGCGAGAGCGGCAAGTCCACCTTCTGAAGCAGATGCGGATC
ATCCACGCCAGGACTTCGACCAGCGCGCGGAGGAGTCCGCCCCACCATCTACAGCAACGTGATCA
AAGGTATGAGGGTCTGGTAGATGCCCGAGAGAAGCTTCATATCCCTGGGGAGATAACAAAACCAGGT
CCACGGAGACAAGTTGATGGCATTGATACCCGAGCTCCCATGGCTGCCAGGGGATGGTGGAGACTCGA
GTTTTTTTGCAGTATCTTCTGTATAAGACCTTATGGGATGACAGTGGCATAACAGAATGCCTACGATC
GGCGCCGGGAATCCAACCTGGGTGAGTCTGTAAAGTATTTCTGGATAACTTGGATAAACTTGGAGTACC
GGACTACATTCGTCACAGCAAGATATTCTGCTTGCCAGAAGACCCACAAAGGCATCCATGAGTATGAC
TTTGAATTAATAATGTTCTTTCAAATGGTTGACGTAGGTGGCCAGAGATCAGAACGGAAACGTTGGT
TTGAATGCTTTGACAGTGTGACATCAATACTCTCCTTGTTCCTCAAGTGAATTTGACCAGGTGCTTAT
GGAGACCGCTGACCAACCGCTCACAGAGTCCCTGAACATTTTGAACAATTTGCAATAACCGGTT
TTCAGCAATGTCTATAATTCTTCTTAAACAAGACAGACTGCTTGAGGAGAAAGTCAAGTTGTAA
GCATCAAAGACTATTTCTAGAATTTGAAGGGGACCCTCACTGCTTAAAGAGACGTCCAAAAGTTTCTGGT
GGAATGCTTCCGGGGAAACGCCGGGACCAGCAGCAGAGGCCGCTGTACCACCACTTACCACCGCCATC
AACACAGAGAACATCCGCCTTGTGTTCCGAGACGTGAAGGACACGATCCTTCATGACAACCTCAAGCAGC
TTATGCTCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR208034 representing NM_001013119
Red=Cloning site Green=Tags(s)

MADFLPSRSVLSVCFPGCVLTNGEAEQQRKSKEIDKCLSREKTYVKRLVKILLGAGESGKSTFLKQMRI
 IHGQDFDQRAREEFRPTIYSNVIKGMRVLDAREKLHIPWGDNKNQVHGDKLMAFDTRAPMAAQGMVETR
 VFLQYLPAIRALWDDSGIQNAYDRRREFQLGESVKYFLDNLDKLGVPDYIPSQQDILLARRPTKGIHEYD
 FEIKNVFPKMDVGGQRSEKRWFECDVSVTSILFLVSSSEFDQVLMEDRLTNRLTESLNIFETIVNNRV
 FSNVSIILFLNKTDLLEEKVQVVSIIKDYFLEFEGDPHCLRDVQKFLVECFRGRKRRDQQQRPLYHHFTTAI
 NTENIRLVFRDVKDITLHDNLKQLMLQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja3322_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001013119

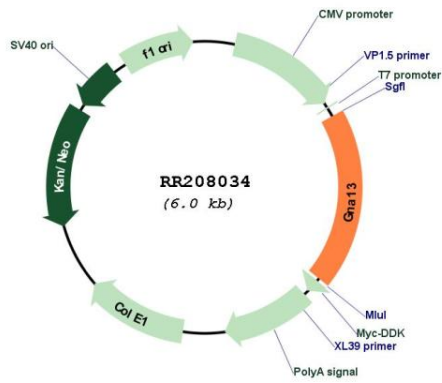
ORF Size: 1131 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001013119.1</u> , <u>NP_001013137.1</u>
RefSeq Size:	1159 bp
RefSeq ORF:	1134 bp
Locus ID:	303634
UniProt ID:	<u>Q6Q7Y5</u>
Cytogenetics:	10q32.1
MW:	44 kDa
Gene Summary:	Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems (PubMed:12176367). Activates effector molecule RhoA by binding and activating RhoGEFs (ARHGEF1/p115RhoGEF, ARHGEF11/PDZ-RhoGEF and ARHGEF12/LARG) (By similarity). GNA13-dependent Rho signaling subsequently regulates transcription factor AP-1 (activating protein-1) (By similarity). Promotes tumor cell invasion and metastasis by activating RhoA/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 RR208034