

Product datasheet for **RG209199**

GNAQ (NM_002072) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNAQ (NM_002072) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GNAQ
Synonyms:	CMC1; G-ALPHA-q; GAQ; SWS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209199 representing NM_002072 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACTCTGGAGTCCATCATGGCGTGCTGCCTGAGCGAGGAGGCCAAGGAAGCCCGCGGATCAACGACG
AGATCGAGCGGCAGCTCCGCAGGGACAAGCGGGACGCCCGCGGGAGCTCAAGCTGCTGTGCTCGGGAC
AGGAGAGAGTGGCAAGAGTACGTTTATCAAGCAGATGAGAATCATCCATGGGTGAGGACTCTGATGAA
GATAAAAGGGGCTTACCAAGCTGGTGTATCAGAACATCTTACGGCCATGCAGGCCATGATCAGAGCCA
TGGACACACTCAAGATCCCATACAAGTATGAGCACAATAAGGCTCATGCACAATTAGTTCGAGAAGTTGA
TGTGGAGAAGGTGTCTGCTTTTGAGAATCCATATGTAGATGCAATAAAGAGTTTATGGAATGATCCTGGA
ATCCAGGAATGCTATGATAGACGACGAGAATATCAATTATCTGACTCTACCAAATACTATCTTAATGACT
TGGACCGCTAGCTGACCTGCCTACCTGCCTACGCAACAAGATGTGCTTAGAGTTCGAGTCCCCACCAC
AGGGATCATCGAATACCCCTTTGACTTACAAAGTGTCATTTTTCAGAAATGGTTCGATGTAGGGGGCCAAAGG
TCAGAGAGAAGAAAATGGATACACTGCTTTGAAAATGTCACCTCTATCATGTTTCTAGTAGCGCTTAGTG
AATATGATCAAGTTCTCGTGGAGTCAGACAATGAGAACCGAATGGAGGAAAGCAAGGCTCTCTTTAGAAC
AATTATCATACCCCTGGTCCAGAACTCCTCGGTTATTCTGTCTTAAACAAGAAAGATCTTCTAGAG
GAGAAAATCATGTATTTCCATCTAGTCGACTACTTCCAGAATATGATGGACCCAGAGAGATGCCCAGG
CAGCCCGAGAATTCATTCTGAAGATGTTCTGGACCTGAACCCAGACAGTGACAAAATTATCTACTCCCA
CTTCACGTGCGCCACAGACACCGAGAATATCCGCTTTGTCTTTGCTGCCGTCAAGGACACCATCCTCCAG
TTGAACCTGAAGGAGTACAATCTGGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG209199 representing NM_002072
 Red=Cloning site Green=Tags(s)

MTLESIMACCLSEEAKEARRINDEIERQLRRDKRDARRELKLLLLGTGESGKSTFIKQMRIIHGSGYSDE
 DKRGFTKLVYQNIIFTAMQAMIRAMDTLKIPYKYEHNKAAHQLVREVDVEKVSFENPYVDAIKSLWNDPG
 IQECYDRRREYQLSDSTKYLLNDLDRVADPAYLPTQQDVLRRVPTTGIIEYFDLQSVIFRMVDVGGQR
 SERRKWIHCFENVTSIMFLVALSEYDQVLVESDNENRMEESKALFRTIITYPWFQNSSVILFLNKKDLLE
 EKIMYSHLVDFPEYDGPQRDAQAAREFILKMFVDLNPDSKIIYSHFTCATDTENIRVFVAVKDITILQ
 LNLKEYNLV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002072

ORF Size: 1077 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_002072.5](#)

RefSeq Size: 2188 bp

RefSeq ORF: 1080 bp

Locus ID: 2776

UniProt ID: [P50148](#)

Cytogenetics: 9q21.2

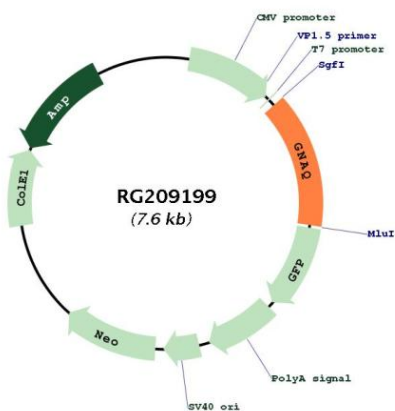
Domains: G-alpha

Protein Families: Druggable Genome

Protein Pathways: Alzheimer's disease, Calcium signaling pathway, Gap junction, GnRH signaling pathway, Huntington's disease, Long-term depression, Long-term potentiation, Melanogenesis, Vascular smooth muscle contraction

Gene Summary: This locus encodes a guanine nucleotide-binding protein. The encoded protein, an alpha subunit in the Gq class, couples a seven-transmembrane domain receptor to activation of phospholipase C-beta. Mutations at this locus have been associated with problems in platelet activation and aggregation. A related pseudogene exists on chromosome 2.[provided by RefSeq, Nov 2010]

Product images:



Circular map for RG209199