

Product datasheet for **SC309030**

G protein alpha inhibitor 1 (GNAI1) (NM_002069) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	G protein alpha inhibitor 1 (GNAI1) (NM_002069) Human Untagged Clone
Tag:	Tag Free
Symbol:	G protein alpha inhibitor 1
Synonyms:	Gi
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<p>>OriGene ORF sequence for NM_002069 edited</p> <p>ATGGGCTGCACGCTGAGCGCCGAGGACAAGGCGCGGTGGAGCGGAGTAAGATGATCGAC CGCAACCTCCGTGAGGACGGCGAGAAGGCGCGCGAGGTCAAGCTGCTGCTCGGT GCTGGTGAATCTGGTAAAAGTACAATTGTGAAGCAGATGAAAATTATCCATGAAGCTGGT TATTCAGAAGAGGAGTGTAAACAATACAAAGCAGTGGTCTACAGTAACACCATCCAGTCA ATTATTGCTATCATTAGGGCTATGGGGAGTTGAAGATAGACTTTGGTGACTCAGCCCGG GCGGATGATGCACGCCAACTCTTTGTGCTAGCTGGAGCTGCTGAAGAAGGCTTTATGACT GCAGAACTTGCTGGAGTTATAAAGAGATTGTGGAAGATAGTGGTGTACAAGCCTGTTTC AACAGATCCCAGAGTACCAGCTTAATGATTCTGCAGCATACTATTTGAATGACTTGGAC AGAATAGCTCAACCAAATTACATCCCGACTCAACAAGATGTTCTCAGAACTAGAGTGAAA ACTACAGGAATTGTTGAAACCCATTTTACTTTCAAAGATCTTCATTTTAAATGTTTGAT GTGGGAGGTCAGAGATCTGAGCGGAAGAAGTGGATTTCATTGCTTCGAAGGAGTGACGGCG ATCATCTTCTGTGTAGCACTGAGTGACTACGACCTGGTTCTAGCTGAAGATGAAGAAATG AACCGAATGCATGAAAGCATGAAATTGTTTGACAGCATATGTAACAACAAGTGGTTTACA GATACATCCATTATACTTTTCTAAACAAGAAGGATCTCTTTGAAGAAAAATCAAAAAG AGCCCTCTCACTATATGCTATCCAGAATATGCAGGATCAAACACATATGAAGAGGCAGCT GCATATATTCAATGTCAGTTTGAAGACCTCAATAAAAGAAAGGACACAAAGGAAATATAC ACCCACTTCACATGTGCCACAGATACTAAGAATGTGCAGTTTGTGTTTGTGCTGTAACA GATGTCATCATAAAAAATAATCTAAAAGATTGTGGTCTCTTTTAA</p>
Restriction Sites:	Please inquire
ACCN:	NM_002069
Insert Size:	2300 bp



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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).
OTI Annotation:	The open reading frame of this clone has been fully sequenced and found to be a perfect match to the protein associated with this reference, NM_002069.5.
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_002069.4, NP_002060.4</u>
RefSeq Size:	3342 bp
RefSeq ORF:	1065 bp
Locus ID:	2770
UniProt ID:	<u>P63096</u>
Cytogenetics:	7q21.11
Domains:	G-alpha
Protein Families:	Druggable Genome
Protein Pathways:	Axon guidance, Chemokine signaling pathway, Gap junction, Leukocyte transendothelial migration, Long-term depression, Melanogenesis, Progesterone-mediated oocyte maturation, Tight junction

Gene Summary:

Guanine nucleotide binding proteins are heterotrimeric signal-transducing molecules consisting of alpha, beta, and gamma subunits. The alpha subunit binds guanine nucleotide, can hydrolyze GTP, and can interact with other proteins. The protein encoded by this gene represents the alpha subunit of an inhibitory complex. The encoded protein is part of a complex that responds to beta-adrenergic signals by inhibiting adenylate cyclase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.