

Product datasheet for MC208563

Gnai1 (NM_010305) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gnai1 (NM_010305) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gnai1
Synonyms:	AU046200; Gialpha1; Gnai-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208563 representing NM_010305 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCTGCACATTGAGCGCTGAGGACAAGGCGGCCGTGGAGCGCAGCAAGATGATCGACCGCAACCTCC
GGGAGGACGGCGAGAAGGCGGCCGCGGGAGGTCAAGCTGCTGCTGGTCTGGGAATCTGGAAAGAG
TACCATTGTGAAGCAGATGAAGATTATCCACGAAGCCGGCTACTCGGAAGAGGAGTGAAGCAGTACAAG
GCAGTGGTCTACAGCAACACTATCCAGTCCATCATTGCCATCATTAGAGCCATGGGGAGGTTGAAAAATCG
ACTTCGGAGACTCTGCTCGGGCGGATGATGCTCGCCAACCTTTTCGTGCTTGTGGGGCTGCAGAAGAAGG
CTTTATGACTGCAGAGCTCGCCGGTGCATAAAGAGACTGTGAAAGACAGTGGTGTGCAAGCCTGCCTC
AACAGATCCCGGGAGTACCAGCTGAACGATTCCGGCAGCGTACTATCTGAATGACTTGGACAGAATAGCAC
AGCCAAATTACATCCCAACTCAGCAGGATGTCCTCAGAACCAGAGTGAAGACCACAGGGATTGTGGAAAC
CCACTTTACCTTCAAAGATCTTCATTTTAAAAATGTTTGACGTGGGAGGTCAGAGGTCAGAGCGGAAGAAG
TGGATCCACTGCTTTGAAGGGGTGACCGCCATCATCTTCTGTGTGGCCCTGAGTGACTATGACCTGGTTC
TTGCTGAAGATGAAGAAATGAACCGTATGCACGAGAGCATGAAGCTGTTTCGATAGCATCTGTAACAACAA
GTGGTTTACAGACACGTCCATCATCCTTTTCTCAACAAGAAGGACCTCTTCAAGAAAAAATAAAAAAG
AGCCCCCTCACGATATGCTACCCAGAATATGCAGGCTCAAACACATATGAAGAAGCGGCCCGGTATATTC
AGTGTGAGTTTGAAGACCTCAATAAAGGAAGGACACAAAGGAAATTTACACCCACTTCAGGTGCGCCAC
AGATACGAAGAACGTGCAGTTCGTGTTTCGATGCTGTAACAGACGTCATCATAAAGAATAACCTAAAAGAC
TGTGGTCTCTTCTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1877_b09.zip



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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_010305
Insert Size:	1065 bp
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).
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:	BC138862 , AAI38863
RefSeq Size:	3193 bp
RefSeq ORF:	1065 bp
Locus ID:	14677
UniProt ID:	B2RSH2
Cytogenetics:	5 8.16 cM
Gene Summary:	Guanine nucleotide-binding proteins (G proteins) function as transducers downstream of G protein-coupled receptors (GPCRs) in numerous signaling cascades. The alpha chain contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP-bound state. Signaling by an activated GPCR promotes GDP release and GTP binding. The alpha subunit has a low GTPase activity that converts bound GTP to GDP, thereby terminating the signal. Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins (By similarity). Signaling is mediated via effector proteins, such as adenylate cyclase. Inhibits adenylate cyclase activity, leading to decreased intracellular cAMP levels (By similarity). The inactive GDP-bound form prevents the association of RGS14 with centrosomes and is required for the translocation of RGS14 from the cytoplasm to the plasma membrane. Required for normal cytokinesis during mitosis. Required for cortical dynein-dynactin complex recruitment during metaphase (By similarity).[UniProtKB/Swiss-Prot Function]