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Product datasheet for RC217958

G0 Protein alpha (GNAO1) (NM_020988) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	G0 Protein alpha (GNAO1) (NM_020988) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GNAO1
Synonyms:	DEE17; EIEE17; G-ALPHA-o; GNAO; HLA-DQB1; NEDIM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC217958 representing NM_020988
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGATGTACTCTGAGCGCAGAGGAGAGAGCCGCCCTCGAGCGGAGCAAGGCGATTGAGAAAAACCTCA
AAGAGGATGGCATCAGCGCCGCCAAAGACGTGAAATTACTCCTGCTCGGGGCTGGAGAATCAGGAAAAAG
CACCATTGTGAAGCAGATGAAGATCATCCATGAAGATGGCTTCTCCGGAGAAGACGTGAAACAGTACAAG
CCTGTTGTCTACAGCAACACTATCCAGTCCCTGGCAGCCATCGTCCGGGCCATGGACACTTTGGGCATCG
AATATGGTGATAAGGAGAGAAAGGCTGACGCCAAGATGGTGTGTGATGTGGTGAGTCGGATGGAAGACAC
CGAGCCCTTCTCTGCAGAGCTGCTTTCTGCCATGATGCGGCTCTGGGGCGACTCAGGAATCCAAGAGTGC
TTCAACCGGTCCCGGGAGTATCAACTCAACGACTCTGCCAAATACTACCTGGACAGCCTGGATCGGATTG
GGGCCGCCGACTACCAGCCCACTGAGCAGGACATCCTCCGAACCAGGGTCAAAACCACTGGCATCGTAGA
AACCCACTTCACATTCAAGAACCTCCACTTCAGGCTGTTTGACGTCGGAGGCCAGCGATCTGAACGCAAG
AAGTGGATCCATTGCTTCGAGGACGTCACGGCCATCATTTTCTGTGTCGCGCTCAGCGGCTATGACCAGG
TGCTCCACGAAGACGAAACCACGAACCGCATGCACGAGTCTCTCATGCTCTTCGACTCCATCTGTAACAA
CAAGTTCTTCATCGATACCTCCATCATTCTCTTCCTCAACAAGAAAGATCTCTTTGGCGAGAAGATCAAG
AAGTCACCTTTGACCATCTGCTTTCCTGAATACACAGGCCCCAATACCTATGAAGACGCAGCCGCCTACA
TCCAAGCACAATTTGAAAGCAAAAACCGCTCACCCAACAAAGAAATATATTGTCACATGACTTGTGCCAC
AGACACGAATAACATCCAGGTGGTGTTCGACGCCGTCACCGACATCATCATTGCCAACAACCTCCGGGGC
TGCGGCTTGTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC217958 representing NM_020988
Red=Cloning site Green=Tags(s)

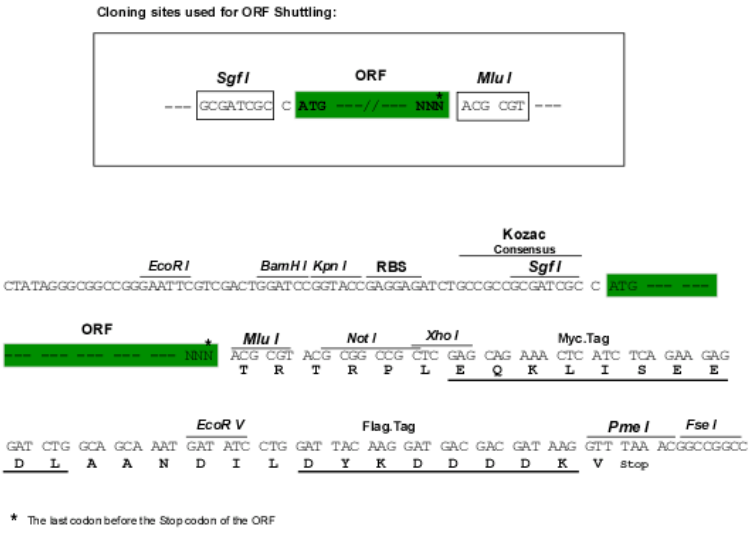
MGCTLSAEERAALERSKAIEKNLKEDGISAAKDVKLLLLGAGESGKSTIVKQMKIIHEDGFSGEDVKQYK
PVVYSNTIQSLAAIVRAMDTLGIEYGDKERKADAKMVCDVVSRMEDTEPFSAELLSAMMRLWGDSGIQEC
FNRSREYQLNDSAKYYLDSLDRIGAADYQPTEQDILRTRVKTTGIVETHFTFKNLHFRLFDVGGQRSERK
KWIHCFEDVTAIIFCVALSGYDQVLHEDETTNRMHESLMLFDSICNNKFFIDTSIILFLNKKDLFGEKIK
KSPLTICFPEYTGPNTYEDAAAYIQAQFESKNRSPNKEIYCHMTCATDTNNIQVVFDAVTDIIIANNLRG
CGLY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

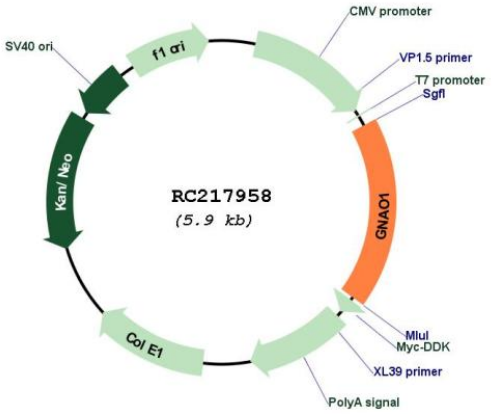
Chromatograms: https://cdn.origene.com/chromatograms/mk6036_b10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

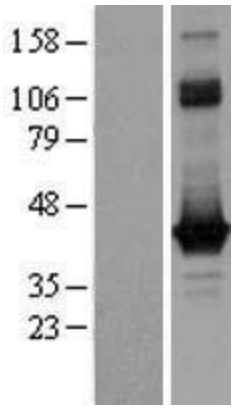


Plasmid Map:

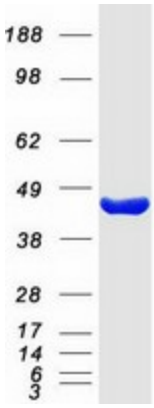


ACCN:	NM_020988
ORF Size:	1062 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_020988.1, NP_066268.1
RefSeq Size:	3332 bp
RefSeq ORF:	1065 bp
Locus ID:	2775
UniProt ID:	P09471
Cytogenetics:	16q13
Domains:	G-alpha
Protein Families:	Druggable Genome
Protein Pathways:	Long-term depression, Melanogenesis
MW:	40.1 kDa
Gene Summary:	The protein encoded by this gene represents the alpha subunit of the Go heterotrimeric G-protein signal-transducing complex. Defects in this gene are a cause of early-onset epileptic encephalopathy. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2015]

Product images:



Western blot validation of overexpression lysate (Cat# [LY402819]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217958 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GNAO1 protein (Cat# [TP317958]). The protein was produced from HEK293T cells transfected with GNAO1 cDNA clone (Cat# RC217958) using MegaTran 2.0 (Cat# [TT210002]).