

Product datasheet for **RC206547**

GNA14 (NM_004297) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNA14 (NM_004297) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GNA14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206547 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGGCTGCTGCTGCCTGTCCGCGGAGGAGAAGGAGTCGCAGCGCATCAGCGCGGAGATCGAGCGAC
AGCTTCGTCGGGACAAGAAGGACGCGCGCCGTGAGCTTAAGCTGCTGCTGCTGGAACTGGTAAAGTGG
GAAAAGCACCTTTATCAAGCAGATGAGAATTATCCATGGTCTGGTTACAGCGACGAAGACAGAAAGGGG
TTCACGAAGCTGGTTTACCAAAACATATTCACCGCCATGCAAGCCATGATCAGAGCGATGGACACGCTAA
GGATACAGTATGTGTGAACAGAATAAGGAAAATGCCAGATAATCAGAGAAGTGAAGTGGACAAGGT
CTCCATGCTCTCCAGGGAGCAGGTGGAGGCCATCAAGCAGCTCTGGCAAGATCCAGGCATCCAGGAGTGT
TACGACAGGAGGAGGAGTACCAGCTGTCGACTCTGCCAAATATTACCTGACTGACATTGACCGCATCG
CCACACCATCATTGCTGCCTACCAACAAGATGTCTTCGCGTCCGAGTGCCACCACCGGCATCATTGA
GTATCCATTTGACTTGGAAAACATCATCTTTCGGATGGTGGATGTTGGTGGCCAACGATCGGAAAGACGG
AAGTGGATTCAGTCTTTGAGAGTGTACCTCCATTTTTCTGGTTGCTCTGAGTGAATATGACCAGG
TCCTGGCTGAGTGTGACAACGAGAATCGCATGGAAGAGAGCAAAGCCTTATTTAAAACCATCATCACCTA
CCCCTGGTTTCTGAATTCGTCTGTGATTTATTCTTGAACAAGAAGGATCTTTTGAAGAGAAAAATCATG
TACTCTCATCTAATTAGCTATTTCCAGAATACACAGGACCGAAACAGGATGTCAGAGCTGCCAGAGACT
TTATCCTGAAGCTTACCAAGATCAGAATCCTGACAAAGAGAAAGTCATCTACTCTCACTTCACATGTGC
TACAGATACAGACAATATTCGCTTTGTGTTTGGTCTGCTGTCAAAGACACAATTCTACAGCTAACCTAAGG
GAATTCACCTTGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC206547 protein sequence
Red=Cloning site Green=Tags(s)

MAGCCCLSAEEKESQRISAEIERQLRRDKKDARRELKLLLLGTGESGKSTFIKQMRIIHGSGYSDEDRKG
 FTKLVYQNIIFTAMQAMIRAMDTLRIQYVCEQNKENAQIIREVEVDKVSMLSREQVEAIKQLWQDPGIQEC
 YDRRREYQLSDSAKYLLTDIDRIATPSFVPTQQDVLRRVPTTGIIEYFPDLENIIFRMVDVGGQSRERR
 KWIHCFSVTSIIIFLVALSEYDQVLAECDNENRMEEESKALFKTIIYWPFLNSSVILFLNKKDLLEEKIM
 YSHLISYFPEYTGPKQDVRAARDFILKLYQDQNPDKKVIYSHFTCATDTONIRVFVAAVKDTILQLNLR
 EFNLV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6521_b11.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004297

ORF Size: 1065 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_004297.4](#)

RefSeq Size: 2492 bp

RefSeq ORF: 1068 bp

Locus ID: 9630

UniProt ID: [O95837](#)

Cytogenetics: 9q21.2

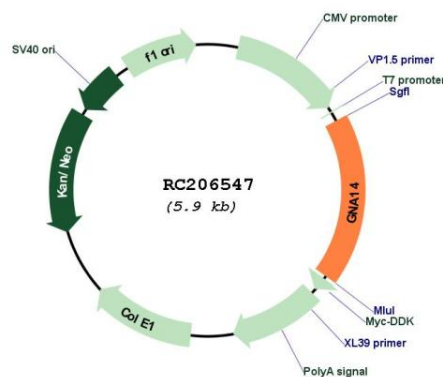
Protein Families: Druggable Genome

Protein Pathways: Calcium signaling pathway

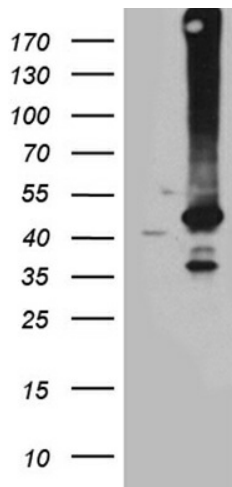
MW: 41.6 kDa

Gene Summary: This gene encodes a member of the guanine nucleotide-binding, or G protein family. G proteins are heterotrimers consisting of alpha, beta and gamma subunits. The encoded protein is a member of the alpha family of G proteins, more specifically the alpha q subfamily of G proteins. The encoded protein may play a role in pertussis-toxin resistant activation of phospholipase C-beta and its downstream effectors.[provided by RefSeq, Feb 2009]

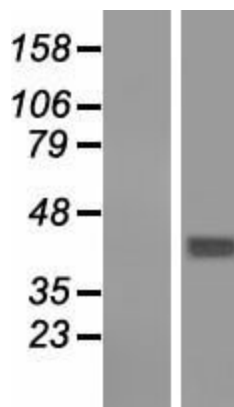
Product images:



Circular map for RC206547



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GNA14 (Cat# RC206547, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GNA14 (Cat# [TA812023]). Positive lysates [LY418087] (100ug) and [LC418087] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418087]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206547 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).