

Product datasheet for **RG206807**

CDS2 (NM_003818) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: CDS2 (NM_003818) Human Tagged ORF Clone
 Tag: TurboGFP
 Symbol: CDS2
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-AC-GFP (PS100010)
 E. coli Selection: Ampicillin (100 ug/mL)
 ORF Nucleotide Sequence: >RG206807 representing NM_003818
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACAGAGCTGAGGCAGAGGGTGGCCCATGAGCCGGTTGCGCCACCCGAGGACAAGGAGTCAGAGTCAG
 AAGCAAAGGTAGATGGAGAGACTGCATCGGACAGTGAGAGCCGGGAGAGATCCGCACCCCTGCCAGTCTC
 TGCAGATGATACCCCGGAGGTCTCAATAGGGCCCTTTCCAACCTGTCTTCAAGATGGAAGAAGTGGTGG
 GTGAGAGGCATCCTGACTTTGGCCATGATTGCATTTTTCTTCATCATCTTTACCTGGGACCAATGGTTT
 TGATGATAATCGTGATGTGCGTTCAGATTAAGTGTTCATGAGATAATCACTATTGGCTACAACGCTCA
 CCACTCATATGATCTGCCCTGGTTCAGGACGCTCAGCTGGTACTTTCTCCTGTGTGTAACCTATTTCTTC
 TATGGTGAGACAGTGACGGATTACTTCTCACCCCTGGTCCAGAGAGAAGAGCCTTTGCGGATTCTCAGTA
 AATACCACCGGTTCAATTCCTTACTCTATCTAATAGGATTCTGCATGTTTGTACTGAGTCTGGTCAA
 GAAGCATTATCGACTGCAGTTCTACATGTTTGGCTGGACCCATGTGACATTGCTGATTGTTGTAACACAG
 TCACATCTTGTATCCACAACCTATTTGAAGGAATGATCTGGTTCATTGTCCCCATATCTGTGTGATCT
 GTAATGACATCATGGCCTATATGTTTGGCTTTTCTTTGGTGGACCCCACTCATCAAGCTGTCCCCGAA
 GAAGACCTGGGAAGGCTTCATTGGGGCTTCTTTGCTACTGTGGTGTGGCCTTCTGCTGCCTATGTG
 ATGTCCGGGTACAGATGCTTTGCTGCCCTGTGGAGTACAACAATGACACCAACAGCTTCACTGTGGACT
 GTGAGCCCTCGGACCTGTTTCGCCTGCAGGAGTACAACATTCCTGGGGTATCCAGTCAGTCATTGGCTG
 GAAAACGGTCCGGATGTACCCCTTCCAGATTCACAGCATCGCTCTCTCCACCTTTGCCTCGCTCATTGGC
 CCCTTTGGAGGATTCTTCGCAAGTGGATTCAAACGAGCCTTTAAAATCAAAGACTTTGCCAATACCATTC
 CTGGCCATGGAGGCATCATGGATCGCTTTGACTGCCAGTATCTGATGGCCACCTTTGTCAATGTATACAT
 CGCCAGTTTTATCAGAGGCCCTAACCAAGCAAAGTATTCAGCAGTTCCTGACTTTACGGCCAGATCAG
 CAGCTCCACATCTTCAACACGCTGCGGTCTCATCTGATCGACAAAGGGATGCTGACATCCACCACAGAGG
 ACGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online >](#)

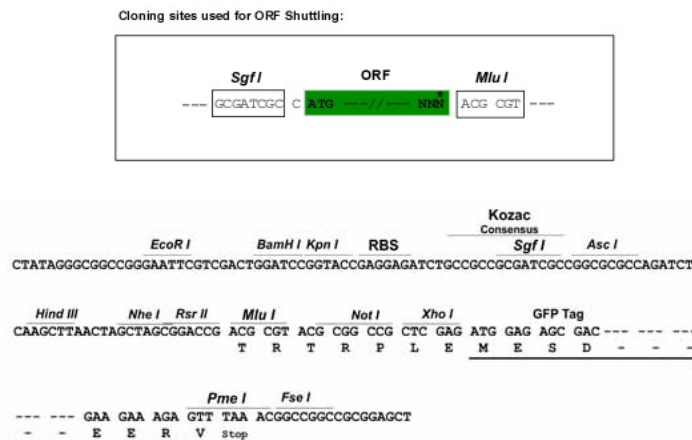
Protein Sequence: >RG206807 representing NM_003818
Red=Cloning site Green=Tags(s)

MTELRQRVAHEPVAPPEDKESESEAKVDGETASDSESRAESAPLPVSADDTPEVLNRLSNLSSRWKNWW
 VRGILTLAMIAFFFIILYLGPMVLMIIVMCVQIKCFHEIITIGYNYVHSYDLPWFRTLWYFLLCVNYFF
 YGETVTDYFFTLVQREEPLRILSKYHRFISFTLYLIGFCMFVLSLVKHKHYRLQFYMGWTHVTLIVVTQ
 SHLVIHNLFEGLIWFIVPISCVICNDIMAYMFGFFFGRTPLIKLSPKKTWEGFIGGFFATVVFGLLLSYV
 MSGYRCFVCPVEYNNDTNSFTVDCEPSDLFRLQEYNIPGVIQSVIGWKTVMYPPFQIHSIALSTFASLIG
 PFGGFFASGFKRAFKIKDFANTIPGHGGIMDRFDCQYLMATFVNVIYIASFIRGNPNSKLIQQFLTLRPDQ
 QLHIFNTRLRSHLIDKGMLTSTTEDE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003818

ORF Size: 1335 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_003818.4](#)

RefSeq Size: 2711 bp

RefSeq ORF: 1338 bp

Locus ID: 8760

UniProt ID: [O95674](#)

Cytogenetics: 20p12.3

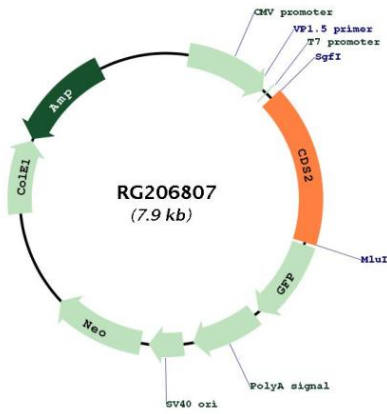
Domains: CTP_transf_1

Protein Families: Transmembrane

Protein Pathways: Glycerophospholipid metabolism, Metabolic pathways, Phosphatidylinositol signaling system

Gene Summary: Breakdown products of phosphoinositides are ubiquitous second messengers that function downstream of many G protein-coupled receptors and tyrosine kinases regulating cell growth, calcium metabolism, and protein kinase C activity. This gene encodes an enzyme which regulates the amount of phosphatidylinositol available for signaling by catalyzing the conversion of phosphatidic acid to CDP-diacylglycerol. This enzyme is an integral membrane protein localized to two subcellular domains, the matrix side of the inner mitochondrial membrane where it is thought to be involved in the synthesis of phosphatidylglycerol and cardiolipin and the cytoplasmic side of the endoplasmic reticulum where it functions in phosphatidylinositol biosynthesis. Two genes encoding this enzyme have been identified in humans, one mapping to human chromosome 4q21 and a second to 20p13. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG206807