

## Product datasheet for **RG210375**

### **CDS1 (NM\_001263) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CDS1 (NM_001263) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CDS1
Synonyms:	CDS 1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG210375 representing NM\_001263  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTTGGAGCTGAGGCACCGGGGAAGCTGCCCGGCCAGGGAAGCGGTGTCGCCACACCGCGAGG  
 GAGAGGCGCGCGCGACCACGAAACCGAGAGCACCAGCGACAAGAAACAGATATTGATGACAGATA  
 TGGAGATTTGGATTCCAGAACAGATTCTGATATCCGGAATTCACCATCCTCAGATAGAACCCTGAG  
 ATTCTCAAAAAGCTCTATCTGGTTTATCTTCAAGGTGGAAAACTGGTGGATACGTGGAATTCTCACTC  
 TAACTATGATCTCGTTGTTTTCTGATCATCTATATGGGATCCTTCATGCTGATGCTTCTGTTCTGGG  
 CATCCAAGTGAATGCTCCATGAAATTACACTATAGGTTATAGAGTCTATCATTCTTATGATCTACCA  
 TGGTTTAGAACACTAAGTTGGTACTTTCTATTGTGTGAAACTACTTTTTCTATGGAGAGACTGTAGCTG  
 ATTATTTTGTACATTTGTTCAAAGAGAAGAACAACCTCAGTTCCCTCATTGCTACCATAGATTTATATC  
 ATTTGCCCTCTATCTGGCAGTTTCTGCATGTTTGTACTGAGTTTGGTGAAGAAACATTATCGTCTGCAG  
 TTTTATATGTTCCGATGGACTCATGTCACCTTACTGATAACTGTCACTCAGTCACACCTTGCATCCAAA  
 ATCTGTTTGAAGGCATGATATGTTTCTTGTCCAATATCAAGTGTATCTGCAATGACATAACTGCTTA  
 CCTTTTTGGATTTTTTTTTGGGAGAACCATTAAATTAAGTTGTCTCCTAAAAAGACTTGGGAAGGATTC  
 ATTGGTGGTTTCTTTCCACAGTTGTGTTGGATTATTGCTGCCTATGTGTTATCCAAATACCAGTACT  
 TTGCTGCCAGTGAATACCGAAGTGATGTAACCTCCTCGTGACAGAAATGTGAGCCCTCAGAACCTTT  
 CCAGCTTCAGACTTACTCACTCCACCCCTTCTAAAGGCAGTCTTGAGACAGGAAAGAGTGAGCTTGAC  
 CCTTCCAGATCCACAGCATTGCCTGCAACCTTTGCATCTTTAATTGGCCATTTGGAGGCTTCTTTG  
 CTAGTGGATTCAAAGAGCCTTCAAATCAAGGATTTTGGCAAATACCATTCCCTGGACATGGTGGGATAAT  
 GGACAGATTTGATTGTCAGTATTTGATGGCAACTTTTGTACATGTGTACATCACAAGTTTTATAAGGGGC  
 CCAAATCCAGCAAAGTGTACAGCAGTTGTTGGTGTCTCAACCTGAACAGCAGTTAAATATATATAAAA  
 CCTGAAGACTCATCTCATTGAGAAAGGAATCCTACAACCACCTTGAAGGTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG210375 representing NM\_001263  
 Red=Cloning site Green=Tags(s)

MLELRHRGSCPGPREAVSPPHREGAAGGDHETESTSDKETDIDDRYGDLDSDIPEIPPSSDRTPE  
 ILKKALSGLSSRWKNWWIRGILTLTMISLFFLIYMGSFMLMLLVLGIQVKCFHEIITIGYRVYHSYDLP  
 WFRTLWYFLLCVNYFFYGETVADYFATFVQREEQLQLIRYHRFISFALYLAGFCMFVLSLVKKHYRLQ  
 FYMFAWTHVTLITVTQSHLVIQNLFEQMIWFLVPISSVICNDITAYLFGFFFGRTPLIKLSPKKTWEGF  
 IGGFFSTVVFGFIAAYVLSKYQYFVCPVEYRSDVNSFVTECEPSELFQLQTYSLPPFLKAVLRQERVSLY  
 PFQIHSIALSTFASLIGPFGGFFASGFKRAFKIKDFANTIPGHGGIMDRFDCQYLMATFVHVYITSFIRG  
 PNPSKVLQQLVLQPEQQLNIYKTLKTHLIEKILQPTLKV

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001263

**ORF Size:** 1383 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\\_001263.4](#)

**RefSeq Size:** 2374 bp

**RefSeq ORF:** 1386 bp

**Locus ID:** 1040

**UniProt ID:** [Q92903](#)

**Cytogenetics:** 4q21.23

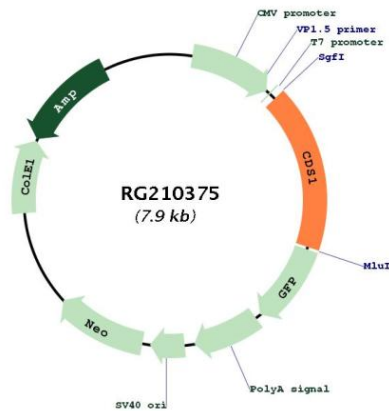
**Domains:** CTP\_transf\_1

**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 RG210375