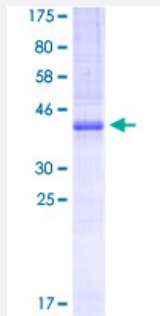


CDS1 (Human) Recombinant Protein (Q01)

Catalog # H00001040-Q01

Size 10 ug, 25 ug

Applications



Specification

| | |
|--------------------------------------|--|
| Product Description | Human CDS1 partial ORF (NP_001254, 1 a.a. - 98 a.a.) recombinant protein with GST-tag at N-terminal. |
| Sequence | MLELRHRGSCPGPREAVSPPHREGEAAGGDHETESTSDKETDIDDRYGDLDSDRTDSDIPEIPPS SDRTPEILKKALSGLSRWKNWWIRGILTLTMIS |
| Host | Wheat Germ (in vitro) |
| Theoretical MW (kDa) | 36.52 |
| Interspecies Antigen Sequence | Mouse (90); Rat (90) |
| Preparation Method | in vitro wheat germ expression system |
| Purification | Glutathione Sepharose 4 Fast Flow |
| Quality Control Testing | 12.5% SDS-PAGE Stained with Coomassie Blue. |
| Storage Buffer | 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer. |
| Storage Instruction | Store at -80°C. Aliquot to avoid repeated freezing and thawing. |
| Note | Best use within three months from the date of receipt of this protein. |

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CDS1

Entrez GeneID [1040](#)

GeneBank Accession# [NM_001263](#)

Protein Accession# [NP_001254](#)

Gene Name CDS1

Gene Alias CDS

Gene Description CDP-diacylglycerol synthase (phosphatidate cytidyltransferase) 1

Omim ID [603548](#)

Gene Ontology [Hyperlink](#)

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]

Other Designations

CDP-DAG synthase 1|CDP-DG synthetase 1|CDP-diacylglycerol synthase 1|CDP-diglyceride pyrophosphorylase 1|CDP-diglyceride synthetase 1|CTP:phosphatidate cytidyltransferase 1|phosphatidate cytidyltransferase 1

Pathway

- [Glycerophospholipid metabolism](#)
- [Metabolic pathways](#)
- [Phosphatidylinositol signaling system](#)

Disease

- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)