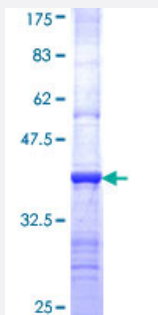


COQ3 (Human) Recombinant Protein (Q01)

Catalog # H00051805-Q01

Size 10 ug, 25 ug

Applications



Specification

| | |
|-------------------------------|--|
| Product Description | Human COQ3 partial ORF (NP_059117, 273 a.a. - 369 a.a.) recombinant protein with GST-tag at N-terminal. |
| Sequence | MPKGTHTWEKFVSPETLESILESNGLSVQTVVGMLYNPFSGYWHWSENTSLNYAAHAVKSRVQE HPASAEFVLKGETEELQANACTNPAVHEKLKK |
| Host | Wheat Germ (in vitro) |
| Theoretical MW (kDa) | 36.41 |
| Interspecies Antigen Sequence | Mouse (73); Rat (81) |
| 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 — COQ3

Entrez GeneID [51805](#)

GeneBank Accession# [NM_017421](#)

Protein Accession# [NP_059117](#)

Gene Name COQ3

Gene Alias UG0215E05, bA9819.1

Gene Description coenzyme Q3 homolog, methyltransferase (S. cerevisiae)

Omim ID [605196](#)

Gene Ontology [Hyperlink](#)

Gene Summary Ubiquinone, also known as coenzyme Q, or Q, is a critical component of the electron transport pathways of both eukaryotes and prokaryotes (Jonassen and Clarke, 2000 [PubMed 10777520]). This lipid consists of a hydrophobic isoprenoid tail and a quinone head group. The tail varies in length depending on the organism, but its purpose is to anchor coenzyme Q to the membrane. The quinone head group is responsible for the activity of coenzyme Q in the respiratory chain. The *S. cerevisiae* COQ3 gene encodes an O-methyltransferase required for 2 steps in the biosynthetic pathway of coenzyme Q. This enzyme methylates an early coenzyme Q intermediate, 3,4-dihydroxy-5-polyprenylbenzoic acid, as well as the final intermediate in the pathway, converting demethyl-ubiquinone to coenzyme Q. The COQ3 gene product is also capable of methylating the distinct prokaryotic early intermediate 2-hydroxy-6-polyprenyl phenol.[supplied by OMIM]

Other Designations OTTHUMP00000016892|methyltransferase COQ3

Pathway

- [Metabolic pathways](#)
- [Ubiquinone and other terpenoid-quinone biosynthesis](#)

Disease

- [Spinal Dysraphism](#)