

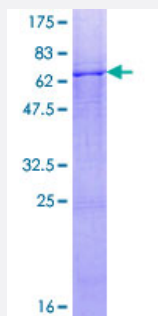
Full-Length

COQ3 (Human) Recombinant Protein (P01)

Catalog # H00051805-P01

Size 10 ug, 25 ug

Applications



Specification

Product Description

Human COQ3 full-length ORF (AAH63463.1, 1 a.a. - 369 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MWSGRKLGS SGGWFLRVLGPGGCNTKAARPLISSAVYVKNQLSGTLQIKPGVFNEYRTWFKSYR
TIFSCLNRIKSF RYPWARLYSTSQT TVDSGEVKTF LALAHKWWDEQGVYAPLHSMNDLRVPFIRD
NLLKTIPNHQPGKPLLGMKILDVGC GGGLLTEPLGRLGASVIGIDPVDENIKTAQCHKSFD PVLDKR
IEYRVCSLEEMEETAETFD AVVASEVVEHVIDLETFLQCCQVLKPGGSLFITTINKTQLSYALGMF
SEIAGNPKGHTHTWEK FVSPETLESILESNGLSVQTVVGMLYNPFSGYWHWSEN TSLNYAAHAV
KSRVQEHPASAEFVLKGETEELQANACTNPAVHEKLKK

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

67.4

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#**[BC063463.1](#)**Protein Accession#**[AAH63463.1](#)**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]). The 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](#)