

## Product datasheet for TP309576L

### COQ3 (NM\_017421) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human coenzyme Q3 homolog, methyltransferase ( <i>S. cerevisiae</i> ) (COQ3), 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC209576 protein sequence Red=Cloning site Green=Tags(s)

MWSGRKLGSSGGWFLRVLGPGGCNTKAARPLISSAVVKNQLSGTLQIKPGVFNEYRTIWFKSYRTIFSC  
LNRIKSFYRYPWARLYSTSQTTVDLSGEVKTFLALAHKWWDEQGVYAPLHSMNDLRVPFIRDNLLKTIPNHQ  
PGKPLLGMKILDVGC GG L L T E P L G R L G A S V I G I D P V D E N I K T A Q C H K S F D P V L D K R I E Y R V C S L E E I V E  
E T A E T F D A V V A S E V E H V I D L E T F L Q C C C Q V L K P G G S L F I T T I N K T Q L S Y A L G I V F S E Q I A G I V P K G T H T  
W E K F V S P E T L E S I L E S N G L S V Q T V G M L Y N P F S G Y W H W S E N T S L N Y A A H A V K S R V Q E H P A S A E F V L K G E T  
E E L Q A N A C T N P A V H E K L K K

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	40.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_059117</a></u>



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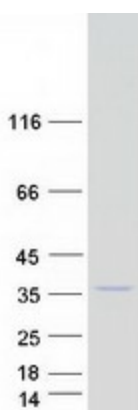
Locus ID: 51805  
UniProt ID: [Q9NZI6](#)  
RefSeq Size: 1265  
Cytogenetics: 6q16.2  
RefSeq ORF: 1107  
Synonyms: bA9819.1; DHHBMT; DHHBMTASE; UG0215E05

**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, Mar 2008]

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Ubiquinone and other terpenoid-quinone biosynthesis

### Product images:



Coomassie blue staining of purified COQ3 protein (Cat# [TP309576]). The protein was produced from HEK293T cells transfected with COQ3 cDNA clone (Cat# [RC209576]) using MegaTran 2.0 (Cat# [TT210002]).