

Product datasheet for PH309576

COQ3 (NM_017421) Human Mass Spec Standard

Product data:

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|---------------------------------------|---|
| Product Type: | Mass Spec Standards |
| Description: | COQ3 MS Standard C13 and N15-labeled recombinant protein (NP_059117) |
| Species: | Human |
| Expression Host: | HEK293 |
| Expression cDNA Clone or AA Sequence: | RC209576 |
| Predicted MW: | 41 kDa |
| Protein Sequence: | >RC209576 protein sequence Red=Cloning site Green=Tags(s) MWSGRKLGSSGGWFLRVLGPGGCNTKAARPLISSAVYVKNQLSGTLQIKPGVFNEYRTIWFKSYRTIFSC LNRIKSFYRYPWARLYSTSQTTVDSEVKTFLALAHKWWDEQGVYAPLHSMNDRVPFIRDNLLKTIPNHQ PGKPLLGMKILDVCGGGLLTEPLGRLGASVIGIDPVDENIKTAQCHKSFDPVLDKRIEYRVCSLEEIVE ETAETFDVAVVASEVVEHVIDLETFLQCCCVLKPGGSLFITTINKTQLSYALGIVFSEQIAGIVPKGTHT WEKFSVPETLESILESNGLSVQTVVGMLYNPFSGYWHWSENTSLNYAAHAVKSRVQEHPSAEFVLKGET EELQANACTNPAVHEKLLK TRTRPLEQKLISEEDLAANDILDYKDDDDKV |
| Tag: | C-Myc/DDK |
| Purity: | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method |
| Labeling Method: | Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine |
| Buffer: | 25 mM Tris-HCl, 100 mM glycine, pH 7.3 |
| Storage: | Store at -80°C. Avoid repeated freeze-thaw cycles. |
| Stability: | Stable for 3 months from receipt of products under proper storage and handling conditions. |
| RefSeq: | NP_059117 |
| RefSeq Size: | 1265 |
| RefSeq ORF: | 1107 |
| Synonyms: | bA9819.1; DHHBMT; DHHBMTASE; UG0215E05 |
| Locus ID: | 51805 |



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UniProt ID: [Q9NZJ6](#)

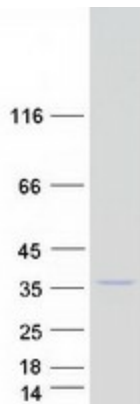
Cytogenetics: 6q16.2

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]).