

## Product datasheet for **RC209576L4V**

### COQ3 (NM\_017421) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	COQ3 (NM_017421) Human Tagged ORF Clone Lentiviral Particle
Symbol:	COQ3
Synonyms:	bA9819.1; DHHBMT; DHHBMTASE; UG0215E05
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_017421
ORF Size:	1107 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC209576).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_017421.3</a>
RefSeq Size:	1265 bp
RefSeq ORF:	1110 bp
Locus ID:	51805
UniProt ID:	<a href="#">Q9NZJ6</a>
Cytogenetics:	6q16.2
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Ubiquinone and other terpenoid-quinone biosynthesis



[View online »](#)

**MW:** 41 kDa

**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, Mar 2008]