

Reporting Title: Coenzyme Q10, Total, P**Performing Location:** Rochester**Ordering Guidance:**

This test does not quantitate reduced coenzyme Q10. For reduced coenzyme Q10 (CoQ10), order Q10 / Coenzyme Q10, Reduced and Total, Plasma.

The most reliable test for the diagnosis of primary defects in ubiquinone (ie, CoQ10) biosynthesis is direct measurement of CoQ10 in muscle.

Necessary Information:

Patient's age is required.

Specimen Requirements:

Patient Preparation: Fasting (8 hours)

Collection Container/Tube: Green top (lithium or sodium heparin)

Submission Container/Tube: Plastic vial

Specimen Volume: 0.5 mL

Collection Instructions:

1. Immediately after collection, place specimen on wet ice. Maintain on wet ice and process within 3 hours of collection.
2. Centrifuge, aliquot plasma into plastic vial, and freeze immediately.

Specimen Minimum Volume:

0.3 mL

Forms:

If not ordering electronically, complete, print, and send a Biochemical Genetics Test Request (T798) with the specimen.

Specimen Type	Temperature	Time	Special Container
Plasma Heparin	Frozen (preferred)	14 days	
	Refrigerated	10 days	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
36764	CoQ10 Total	Alphanumeric	mcg/L	27923-2
36765	Interpretation (TQ10)	Alphanumeric		59462-2
36777	Reviewed By	Alphanumeric		18771-6

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

82542

Reference Values:

<18 years: 320-1558 mcg/L

> or =18 years: 433-1532 mcg/L

Miles MV, Horn PS, Tang PH, et al. Age-related changes in plasma coenzyme Q10 concentrations and redox state in apparently healthy children and adults. Clin Chim Acta. 2004;34:139-144