

# Coenzyme Q9 + Q10



#### **Deliverables**

This pre-validated panel includes both reduced and oxidized form of Coenzyme Q9 and Coenzyme Q10 and allows delivery of **fully quantitative results** (expressed in pmol). In addition, the amount of each sample used is provided (weight or volume).



#### **Method**

Ubiquinones and Ubiquinols are analysed by **LC/ESI-MS/MS** with an Agilent 1290 HPLC system combined with an Agilent 6495 Triplequad mass spectrometer (Agilent Technologies, Santa Clara, USA). Samples are extracted with organic solvents. For lipid quantification, deuterated internal standards are added prior to sample extraction. Extracts are loaded on the LC system for LC/ESI-MS/MS analysis. Mass spectrometry analysis is performed with multiple reaction monitoring (MRM) in positive ion mode with at least two mass transitions for each compound. Data analysis is done using Mass Hunter software (Agilent Technologies).



### Sample submission guidelines

SAMPLE TYPE	SAMPLE AMOUNT	SHIPMENT CONDITIONS
Whole blood, plasma, serum	50 μΙ	Frozen, on dry ice
Tissue	20 mg	Frozen pieces of tissues, on dry ice
Feces	20 mg	Frozen, on dry ice
Cells	1 × 10 <sup>6</sup> cells <i>or</i> 150 µg of total protein	Frozen cell pellet, on dry ice
Cell supernatant, media, liquids, etc.	0.5-20 ml	Frozen, on dry ice

## Minimal sample number: 10

#### Standard turnaround time: 6 weeks

(for projects with up to 100 samples)

**Expedited delivery** is possible for an additional fee.

## **Applications**

- Biomarker for oxidative stress (lipid peroxidation)
- Dietary supplementation
- Pharmaceutical quality control
- Neurodegenerative and cardiovascular diseases

## **Covered analytes**

ANALYTE	STATE	FORM	
Coenzyme Q10	oxidized	ubiquinone	
Coenzyme Q10	reduced	ubiquinol	
Coenzyme Q9	oxidized	ubiquinone	
Coenzyme Q9	reduced	ubiquinol	







