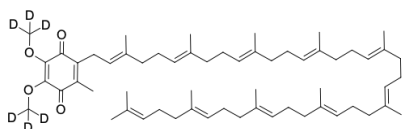


Coenzyme Q10-d6

<http://www.lumiprobe.com/p/coenzyme-q10-d6>

Coenzyme Q10 (ubiquinone) is a naturally occurring quinone found in cell membranes, mainly in mitochondrial membranes, with the highest concentration in the heart, lungs, liver, kidney, spleen, pancreas and adrenal glands. It is a component of the electron-transport chain and participates in aerobic cellular respiration. CoQ10 is a cofactor for mitochondrial enzyme complexes involved in oxidative phosphorylation in the synthesis of adenosine triphosphate, as well as an effective membrane antioxidant. The content of coenzyme Q10 and values of its redox status in the body can be determined as a biomarker of oxidative stress in cardiovascular diseases, diabetes, and it is also important for the assessment of hyperlipidemia treatment efficiency. CoQ10 blood levels should be monitored for patients with neurodegenerative diseases and mitochondrial encephalomyopathies.

This product is a CoQ10 labeled with stable isotope (deuterium) for the quantiation of CoQ10 in biological samples by means of tandem mass spectrometry.



Structure of Coenzyme Q10-d6

General properties

- Appearance: orange solid
- Molecular weight: 869.38
- CAS number: 1331655-96-9
- Molecular formula: $C_{59}H_{84}D_6O_4$
- Solubility: acetonitrile, DMSO, methanol, water
- Quality control: NMR 1H and HPLC-MS (95+ %, D: 95+ %)
- Storage conditions: 24 months after receipt at -20 °C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
- Legal statement: This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.