

Product Data Sheet

UQCRH Protein, Human (GST)

| Cat. No.: | HY-P71088 |
|-------------------|---|
| Synonyms: | Cytochrome b-c1 complex subunit 6; mitochondrial; Complex III subunit 6; Complex III subunit VIII; Cytochrome c1 non-heme 11 kDa protein; Mitochondrial hinge protein; Ubiquinol- cytochrome c reductase complex 11 kDa protein |
| Species: | Human |
| Source: | E. coli |
| Accession: | P07919 (M1-K91) |
| Gene ID: | 7388 |
| Molecular Weight: | 33-45 kDa |

| PROPERTIES | |
|---------------------|--|
| PROPERTIES | |
| AA Sequence | MGLEDEQKML TESGDPEEEE EEEELVDPL TTVREQCEQL EKCVKARERL ELCDERVSSR SHTEEDCTEE LFDFLHARDH CVAHKLFNNL K |
| Appearance | Lyophilized powder. |
| Formulation | Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. |
| Endotoxin Level | <1 EU/µg, determined by LAL method. |
| Reconsititution | It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose). |
| Storage & Stability | Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage. |
| Shipping | Room temperature in continental US; may vary elsewhere. |

DESCRIPTION

Background

UQCRH, a vital constituent of the ubiquinol-cytochrome c oxidoreductase, is a key component of the mitochondrial electron transport chain essential for oxidative phosphorylation. As part of the respiratory chain, which includes succinate dehydrogenase (complex II), ubiquinol-cytochrome c oxidoreductase (complex III), and cytochrome c oxidase (complex IV), UQCRH collaborates in transferring electrons from NADH and succinate to molecular oxygen, establishing an electrochemical gradient across the inner membrane to drive ATP synthase and transmembrane transport. Operating within the cytochrome b-c1 complex, UQCRH catalyzes the transfer of electrons from ubiquinol to cytochrome c, coupling this redox reaction with the translocation of protons across the mitochondrial inner membrane. In the Q cycle process, protons are consumed from the matrix, released into the intermembrane space, and electrons are passed to cytochrome c. UQCRH is a component of the multisubunit ubiquinol-cytochrome c oxidoreductase complex, comprised of various subunits, including respiratory and core proteins, forming obligatory dimers and supercomplexes in the inner mitochondrial membrane with other respiratory complexes like NADH-ubiquinone oxidoreductase (complex I) and cytochrome c oxidase (complex IV).

Caution: Product has not been fully validated for medical applications. For research use only.

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