

CYC1 Blocking Peptide (Center)
Synthetic peptide
Catalog # BP20574c**Specification**

CYC1 Blocking Peptide (Center) - Product InformationPrimary Accession [P08574](#)**CYC1 Blocking Peptide (Center) - Additional Information****Gene ID** 1537**Other Names**

Cytochrome c1, heme protein, mitochondrial, Complex III subunit 4, Complex III subunit IV, Cytochrome b-c1 complex subunit 4, Ubiquinol-cytochrome-c reductase complex cytochrome c1 subunit, Cytochrome c-1, CYC1

Target/Specificity

The synthetic peptide sequence is selected from aa 162-176 of HUMAN CYC1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CYC1 Blocking Peptide (Center) - Protein Information**Name** CYC1**Function**

Component of the ubiquinol-cytochrome c oxidoreductase, a multisubunit transmembrane complex that is part of the mitochondrial electron transport chain which drives oxidative phosphorylation. The respiratory chain contains 3 multisubunit complexes succinate dehydrogenase (complex II, CII), ubiquinol-cytochrome c oxidoreductase (cytochrome b-c1 complex, complex III, CIII) and cytochrome c oxidase (complex IV, CIV), that cooperate to transfer electrons derived from NADH and succinate to molecular oxygen, creating an electrochemical gradient over the inner membrane that drives transmembrane transport and the ATP synthase. The cytochrome b-c1 complex catalyzes electron transfer from ubiquinol to cytochrome c, linking this redox reaction to translocation of protons across the mitochondrial inner membrane, with protons being carried across the membrane as hydrogens on the quinol. In the process called Q cycle, 2 protons are consumed from the matrix, 4 protons are released into the intermembrane space and 2 electrons are passed to cytochrome c. Cytochrome c1 is a catalytic core subunit containing a c-type heme. It transfers electrons from the [2Fe-2S] iron-sulfur cluster of the Rieske

protein to cytochrome c.

Cellular Location

Mitochondrion inner membrane {ECO:0000250|UniProtKB:P07143}; Single-pass membrane protein {ECO:0000250|UniProtKB:P07143}

CYC1 Blocking Peptide (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

CYC1 Blocking Peptide (Center) - Images**CYC1 Blocking Peptide (Center) - Background**

This is the heme-containing component of the cytochrome b-c1 complex, which accepts electrons from Rieske protein and transfers electrons to cytochrome c in the mitochondrial respiratory chain.

CYC1 Blocking Peptide (Center) - References

Nishikimi M., et al. Nucleic Acids Res. 16:3577-3577(1988).
Suzuki H., et al. J. Biol. Chem. 264:1368-1374(1989).
Halleck A., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Kalnine N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Nusbaum C., et al. Nature 439:331-335(2006).