

**SCO2 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17644b****Specification**

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**SCO2 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [O43819](#)**SCO2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 9997**Other Names**

Protein SCO2 homolog, mitochondrial, SCO2

**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.

**SCO2 Antibody (C-term) Blocking Peptide - Protein Information****Name** SCO2**Function**

Copper metallochaperone essential for the synthesis and maturation of cytochrome c oxidase subunit II (MT-CO2/COX2). Involved in transporting copper to the Cu(A) site on MT-CO2/COX2 (PubMed:<a href="http://www.uniprot.org/citations/15229189" target="\_blank">15229189</a>, PubMed:<a href="http://www.uniprot.org/citations/17189203" target="\_blank">17189203</a>). Also acts as a thiol-disulfide oxidoreductase to regulate the redox state of the cysteines in SCO1 during maturation of MT-CO2/COX2 (PubMed:<a href="http://www.uniprot.org/citations/19336478" target="\_blank">19336478</a>).

**Cellular Location**

Mitochondrion inner membrane; Single-pass membrane protein

**Tissue Location**

Ubiquitous.

**SCO2 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **SCO2 Antibody (C-term) Blocking Peptide - Images**

#### **SCO2 Antibody (C-term) Blocking Peptide - Background**

Cytochrome c oxidase (COX) catalyzes the transfer of electrons from cytochrome c to molecular oxygen, which helps to maintain the proton gradient across the inner mitochondrial membrane that is necessary for aerobic ATP production. Human COX is a multimeric protein complex that requires several assembly factors; this gene encodes one of the COX assembly factors. The encoded protein is a metallochaperone that is involved in the biogenesis of cytochrome c oxidase subunit II. Mutations in this gene are associated with fatal infantile encephalomyopathy.

#### **SCO2 Antibody (C-term) Blocking Peptide - References**

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Foltopoulou, P.F., et al. Biochim. Biophys. Acta 1802(6):497-508(2010)  
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