

COX10 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP10714b**Specification**

COX10 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q12887](#)**COX10 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 1352**Other Names**

Protoheme IX farnesyltransferase, mitochondrial, 251-, Heme O synthase, COX10

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.

COX10 Antibody (C-term) Blocking peptide - Protein Information**Name** COX10**Function**

Converts protoheme IX and farnesyl diphosphate to heme O.

Cellular Location

Mitochondrion membrane; Multi-pass membrane protein

COX10 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

COX10 Antibody (C-term) Blocking peptide - Images**COX10 Antibody (C-term) Blocking peptide - Background**

Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is

a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may function in the regulation and assembly of the complex. This nuclear gene encodes heme A:farnesyltransferase, which is not a structural subunit but required for the expression of functional COX and functions in the maturation of the heme A prosthetic group of COX. This protein is predicted to contain 7-9 transmembrane domains localized in the mitochondrial inner membrane. A gene mutation, which results in the substitution of a lysine for an asparagine (N204K), is identified to be responsible for cytochrome c oxidase deficiency. In addition, this gene is disrupted in patients with CMT1A (Charcot-Marie-Tooth type 1A) duplication and with HNPP (hereditary neuropathy with liability to pressure palsies) deletion.

COX10 Antibody (C-term) Blocking peptide - References

Chen, Z., et al. Oncogene 29(30):4362-4368(2010) Vitali, M., et al. J Neural Transm 116(12):1635-1641(2009) Dassa, E.P., et al. EMBO Mol Med 1(1):30-36(2009) Veluthakal, R., et al. Diabetes 56(1):204-210(2007) Coenen, M.J., et al. Ann. Neurol. 56(4):560-564(2004)