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COX10 Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP10714b

Specification

COX10 Antibody (C-term) Blocking peptide - Product Information

Primary 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 themitochondrial respiratory chain, catalyzes the electron transferfrom reduced cytochrome c to oxygen. This component is

aheteromeric complex consisting of 3 catalytic subunits encoded bymitochondrial genes and multiple structural subunits encoded bynuclear genes. The mitochondrially-encoded subunits function inelectron transfer, and the nuclear-encoded subunits may function inthe regulation and assembly of the complex. This nuclear geneencodes heme A:farnesyltransferase, which is not a structuralsubunit but required for the expression of functional COX andfunctions in the maturation of the heme A prosthetic group of COX.This protein is predicted to contain 7-9 transmembrane domainslocalized 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 oxidasedeficiency. In addition, this gene is disrupted in patients withCMT1A (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)