SCO2, 42-266aa, Human, His tag, E.coli

Cat.NO.: TP03865

3th Edition

Synonyms: Protein SCO2 homolog, mitochondrial, SCO1L

Description:SCO2 protein belongs to the SCO1/2 family of proteins. Both SCO1 and SCO2 proteins are located on the inner membrane of the mitochondria and plays a crucial role in copper insertion or transport to the active site of cytochrome c oxidase (COX). Defects in SCO2 are the cause of fatal infantile cardioencephalomyopathy with cytochrome c oxidase deficiency (FIC). This disease is characterized by hypertrophic cardiomyopathy, lactic acidosis, and gliosis. Heart and skeletal muscle show reductions in cytochrome c oxidase (COX) activity, whereas liver and fibroblasts show mild COX deficiencies. Recombinant human SCO2 protein, fused to His-tag at Nterminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form: Liquid. 20mM Tris-HCl buffer (pH8.0) containing 30% glycerol, 2mM DTT, 200mM NaCl

Molecular Weight:27.4kDa (246aa), confirmed by MALDI-TOF

Sequences:
MGSSHHHHHHSSGLVPRGSHMGPAETGGQGQPQGPGLRTRLLITGLFGAGLGGAWLALRAEKERLQQQKRTEA
LRQAAVGQGDFHLLDHRGRARCKADFRGQWVLMYFGFTHCPDICPDELEKLVQVVRQLEAEPGLPPVQPVFITVD
PERDDVEAMARYVQDFHPRLLGLTGSTKQVAQASHSYRVYYNAGPKDEDQDYIVDHSIAIYLLNPDGLFTDYYGRS
RSAEQISDSVRRHMAAFRSVLS

Purity:> 95% by HPLC

Concentration:0.5 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.