Recombinant Human SCO2 protein (His Tag)

Catalog Number: PDEH100989

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

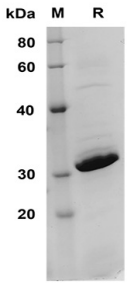
Description

Species	Human
Source	E.coli-derived Human SCO2 protein Gly42-Ser266, with an N-terminal His & C-terminal His
Calculated MW	24.6 kDa
Observed MW	31 kDa
Accession	O43819
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human SCO2 proteins, 2μg/lane of Recombinant Human SCO2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 31 KD.

Background

Acts as a copper chaperone, transporting copper to the Cu(A) site on the cytochrome c oxidase subunit II (COX2). 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.