# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 80-545aa

**UniProt No.** P51687

NCBI Accession No. NP\_000447.2

Alternative Names Sulfite oxidase

# **PRODUCT SPECIFICATION**

Molecular Weight 53.9 kDa (489aa)

**Concentration** 1mg/ml (determined by Bradford assay)

#### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 30% glycerol, 1mM DTT

#### Purity

> 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### Description

SuOX also known as sulfite oxidase. SuOX is a homodimeric protein localized to the intermembrane space of mitochondria. Each subunit contains a heme domain and a molybdopterin-binding domain. This enzyme catalyzes the oxidation of sulfite to sulfate, the final reaction in the oxidative degradation of the sulfur amino acids cysteine and methionine. SuOX deficiency results in neurological abnormalities which are often fatal at an early age. Recombinant human SuOX protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.



#### **Amino acid Sequence**

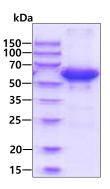
<MGSSHHHHHH SSGLVPRGSH MGS>ESTHIYT KEEVSSHTSP ETGIWVTLGS EVFDVTEFVD LHPGGPSKLM LAAGGPLEPF WALYAVHNQS HVRELLAQYK IGELNPEDKV APTVETSDPY ADDPVRHPAL KVNSQRPFNA EPPPELLTEN YITPNPIFFT RNHLPVPNLD PDTYRLHVVG APGGQSLSLS LDDLHNFPRY EITVTLQCAG NRRSEMTQVK EVKGLEWRTG AISTARWAGA RLCDVLAQAG HQLCETEAHV CFEGLDSDPT GTAYGASIPL ARAMDPEAEV LLAYEMNGQP LPRDHGFPVR VVVPGVVGAR HVKWLGRVSV QPEESYSHWQ RRDYKGFSPS VDWETVDFDS APSIQELPVQ SAITEPRDGE TVESGEVTIK GYAWSGGGRA VIRVDVSLDG GLTWQVAKLD GEEQRPRKAW AWRLWQLKAP VPAGQKELNI VCKAVDDGYN VQPDTVAPIW NLRGVLSNAW HRVHVYVSP

#### **General References**

Rudolph M.J., et al. (2003) Acta Crystallogr. D 59:1183-1191. Kisker C., et al. (1997) Cell 91:973-983.

### DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.