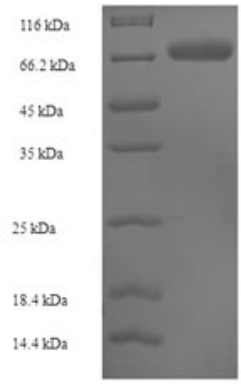
Recombinant Human Sulfite oxidase, mitochondrial (SUOX)

Product Code	CSB-EP022954HU
Abbreviation	Recombinant Human SUOX protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P51687
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ESTHIYTKEEVSSHTSPETGIWVTLGSEVFDVTEFVDLHPGGPSKLMLAAGGP LEPFWALYAVHNQSHVRELLAQYKIGELNPEDKVAPTVETSDPYADDPVRHPA LKVNSQRPFNAEPPPELLTENYITPNPIFFTRNHLPVPNLDPDTYRLHVVGAPG GQSLSLSLDDLHNFPRYEITVTLQCAGNRRSEMTQVKEVKGLEWRTGAISTAR WAGARLCDVLAQAGHQLCETEAHVCFEGLDSDPTGTAYGASIPLARAMDPEA EVLLAYEMNGQPLPRDHGFPVRVVVPGVVGARHVKWLGRVSVQPEESYSHW QRRDYKGFSPSVDWETVDFDSAPSIQELPVQSAITEPRDGETVESGEVTIKGY AWSGGGRAVIRVDVSLDGGLTWQVAKLDGEEQRPRKAWAWRLWQLKAPVP AGQKELNIVCKAVDDGYNVQPDTVAPIWNLRGVLSNAWHRVHVYVSP
Research Area	Metabolism
Source	E.coli
Target Names	SUOX
Expression Region	80-545aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	67.6kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The region for expressing recombinant Human SUOX contains amino acids 80-545. This SUOX protein is expected to have a theoretical molecular weight of 67.6 kDa. The SUOX protein was expressed in e.coli. The SUOX coding gene included the N-terminal 6xHis-SUMO tag, which simplifies the detection and purification processes of the recombinant SUOX protein in following stages of expression and purification.

Sulfite oxidase, mitochondrial (SUOX) is a crucial enzyme involved in the oxidation of sulfite to sulfate in the mitochondria. This process is vital for the metabolism of sulfur-containing amino acids, such as cysteine and methionine. SUOX plays a pivotal role in maintaining sulfur homeostasis and preventing the accumulation of toxic sulfite levels in the body. Additionally, SUOX is essential for the proper functioning of the molybdenum cofactor (Moco), a prosthetic group required for the enzyme's activity. Mutations in the SUOX gene can lead to a rare inherited disorder known as isolated sulfite oxidase deficiency, characterized by neurological abnormalities and other health complications. Research on SUOX contributes to a better understanding of sulfur metabolism, redox balance, and the molecular basis of genetic disorders related to sulfite oxidase deficiency.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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