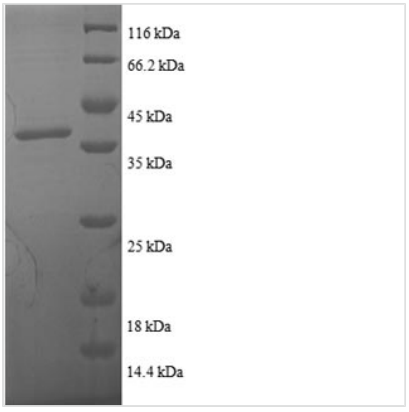
Recombinant Human Thioredoxin (TXN)

Product Code	CSB-EP025365HU
Relevance	Participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyzes dithiol-disulfide exchange reactions. Plays a role in the reversible S-nitrosylation of cysteine residues in target proteins, and thereby contributes to the response to intracellular nitric oxide. Nitrosylates the active site Cys of CASP3 in response to nitric oxide (NO), and thereby inhibits caspase-3 activity. Induces the FOS/JUN AP-1 DNA-binding activity in ionizing radiation (IR) cells through its oxidation/reduction status and stimulates AP-1 transcriptional activity.ADF augments the expression of the interleukin-2 receptor TAC (IL2R/P55).
Abbreviation	Recombinant Human TXN 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.	P10599
Alias	ATL-derived factor ;ADFSurface-associated sulphydryl protein ;SASP
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	VKQIESKTAFQEALDAAGDKLVVVDFSATWCGPCKMIKPFFHSLSEKYSNVIFL EVDVDDCQDVASECEVKCMPTFQFFKKGQKVGEFSGANKEKLEATINELV
Research Area	Transport
Source	E.coli
Target Names	TXN
Expression Region	2-105aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged
Mol. Weight	38.6kDa
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 recombinant Human TXN protein synthesis in e.coli cells necessitates the incorporation of a DNA fragment encoding the Human TXN protein (2-105aa) into a plasmid vector, followed by the transformation of this vector into e.coli cells. After screening for positive cells, they are cultured and induced to express the TXN protein. The protein carries a N-terminal GST tag. Cell lysis is performed to gather the recombinant Human TXN protein, which undergoes affinity purification and is then analyzed using SDS-PAGE and subsequent staining of the gel with Coomassie Brilliant Blue. The purity of the resulting recombinant Human TXN protein reaches up to 90%.

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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