Data Sheet (Cat.No.TMPJ-00826)

TargetMol

TXN Protein, Human, Recombinant (His)

General Information

Synonyms:	ADF;TXN;TRX1;Thioredoxin;TRX;ATL-Derived Factor;TRDX;Surface-Associated Sulphydryl Protein;SASP
Protein Construction:	Met1-Val105
Species:	Human
Expression Host:	E. coli
Accession:	P10599
Molecular Weight:	14 KDa (reducing condition)
AA Sequence:	Met1-Val105

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM PB, 1 mM EDTA, 2 mM DTT, pH 7.2.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Thioredoxin (TXN) is a member of the Thioredoxin family. Thioredoxin exists as a disulfide-linked homodimer and contains one Thioredoxin domain. Thioredoxin is up-regulated by ionizing radiation. Thioredoxin participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyzes dithiol-disulfide exchange reactions. Thioredoxin also plays a role in the reversible S-nitrosylation of cysteine

residues in target proteins, and thereby contributes to the response to intracellular nitric oxide.