Recombinant Human Thioredoxin/SASP/TXN Protein

Catalog No.: RP00036

Sequence Information

Species
Human

Gene ID
7295

Swiss Prot
P10599

Tags
C-His

Synonyms
TRDX, TRX, TRX1,TXN,TRX,TRX1

Product Information

Source
E. coli

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
12.45 kDa

Observed MW
15 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of 20mM Tris, 150mM NaCl, pH 8.0.Contact us for customized product form or formulation.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Thioredoxin, also known as ATL-derived factor, Surface-associated sulphydryl protein, SASP and TXN, is a nucleus, cytoplasm and secreted protein which belongs to the thioredoxin family. Trx-1 is the only extracellular occurring thioredoxin, and is secreted by lymphocytes, hepatocytes, fibroblasts, and several tumor cells. Plasma concentrations of Trx-1 are up to 6 nM . In cells, Trx-1 is localized predominantly in the cytoplasm. Small amounts have been detected in the nucleus and in association with the outside surface of the cells. Biological functions of Trx-1 include growth factor activity, antioxidant properties, a cofactor that provides reducing equivalents, and transcriptional regulation.

Basic Information

Description
Recombinant Human Thioredoxin/SASP/TXN Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Val2-Val105) of human Thioredoxin (Accession #NP_003320.2) fused with a 6×His tag at the C-terminus.

Activity
1.Measured by its binding ability in a functional ELISA. Immobilized Human TXN Protein at 1 μg/mL (100 μL/well) can bind TXN Rabbit mAb with a linear range of 0.976-5.3 ng/mL.
2.Measured by its ability to catalyze the reduction of insulin. The reaction leads to precipitation, which can be measured by absorbance at 650 nm. The specific activity is >9 A650/min/mg.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

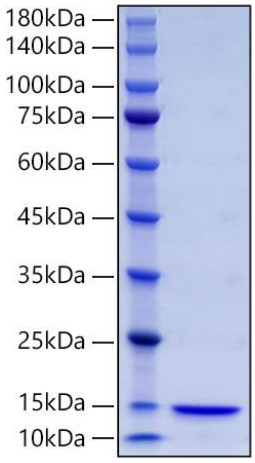
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

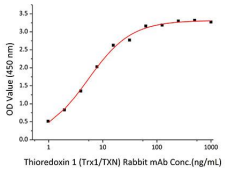
400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

Validation Data



Recombinant Human Thioredoxin/SASP/TXN Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized recombinant Human TXN Protein at 1μg/mL (100 μL/well) can bind TXN Rabbit mAb with a linear range of 0.976-5.3ng/mL.