Recombinant Human Thioredoxin/TXN Protein (His Tag)

Catalog Number: PKSH033108

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description | |
|----------------|--|
| Species | Human |
| Source | E.coli-derived Human Thioredoxin; TXN protein Met 1-Val105, with an N-terminal His |
| Calculated MW | 13.9 kDa |
| Observed MW | 14 kDa |
| Accession | P10599 |
| Bio-activity | Not validated for activity |
| Properties | |
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 |
| | °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of |
| | reconstituted samples are stable at $< -20^{\circ}$ C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a 0.2 μm filtered solution of 20mM PB, 1mM EDTA, 2mM DTT, pH |
| | 7.2. |
| | Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants |
| | before lyophilization. |
| | Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 95 % as determined by reducing SDS-PAGE.

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.