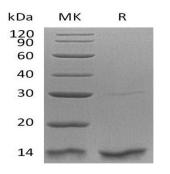
Recombinant Human Thioredoxin-2/TXN2 Protein

Catalog Number: PKSH033109

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

| Description | |
|----------------|--|
| Species | Human |
| Source | E.coli-derived Human Thioredoxin-2; TXN2 protein Thr60-Gly166 |
| Calculated MW | 12.0 kDa |
| Observed MW | 13 kDa |
| Accession | Q99757 |
| 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 PBS, pH 7.4. |
| | 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-2 (TXN2) is a mitochondrial member of the thioredoxin family. Thioredoxin-2 is extensively expressed in adult and fetal tissues. Thioredoxin-2 contains an N-terminal 59 amino acid transit peptide; which is cleaved before translocating to mitochondria. Mitochondrial thioredoxin play important roles in the regulation of the mitochondrial membrane potential and in protection against oxidant-induced apoptosis. Thioredoxin-2 could be involved in the resistance to anti-tumor agents and possesses a dithiol-reducing activity. In addition; Thioredoxin-2 is important at low oxidative stress conditions.