



# Recombinant Protein Technical Manual

## Recombinant Human Thioredoxin-2/TXN2 Protein (His Tag) RPES0719

### Product Data:

**Product SKU:** RPES0719

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** Q99757

### Protein Information:

**Molecular Mass:** 12.0 kDa

**AP Molecular Mass:** 13 kDa

**Tag:** N-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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°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, 150mM NaCl, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Thioredoxin Mitochondrial; MTRX; Mt-Trx; Thioredoxin-2; TXN2; TRX2

## Immunogen Information:

**Sequence:** Thr60-Gly166

## 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.