



## Recombinant Protein Technical Manual

Recombinant Human TXNRD1/TRXR1 Protein (aa  
161-647, His Tag)  
RPES1217

### Product Data:

**Product SKU:** RPES1217

**Size:** 20µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** Q16881

### Protein Information:

**Molecular Mass:** 55 kDa

**AP Molecular Mass:** 60 kDa

**Tag:** N-His

**Bio-activity:**

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**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 sterile PBS, pH 7.4

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

**Application:**

**Synonyms:** GRIM2;TR;TR1;TRXR1;TXNR

## Immunogen Information:

**Sequence:** Tyr 161-Cys 647

## Background:

Thioredoxin reductase 1 (TXNRD1) which is a selenocysteine-containing protein is overexpressed in many malignancies. TXNRD1 plays a key role in regulating cell growth and transformation, and protects cells against oxidative damage. We investigated the association between TXNRD1 polymorphisms and ATDH susceptibility. Moreover, TXNRD1 is an essential selenium-containing enzyme involved in detoxification of reactive oxygen species (ROS) and redox signaling. And genetic variations in TXNRD1 favor the development of Drug-induced liver injury (DILI), which is the most common adverse drug reaction.