

## Product datasheet for **TA363716**

### **TXNRD1 Rabbit Polyclonal Antibody**

#### **Product data:**

|                         |   |
|-------------------------|---|
| Product Type:           | Primary Antibodies  |
| Applications:           | WB  |
| Reactivity:             | Human   |
| Host:                   | Rabbit  |
| Clonality:              | Polyclonal  |
| Immunogen:              | The immunogen is a synthetic peptide directed towards the middle region of human TXNRD1   |
| Specificity:            | <b>Expected reactivity:</b> Human   |
| Formulation:            | Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.<br><i>Note that this product is shipped as lyophilized powder to China customers.</i> |
| Concentration:          | lot specific  |
| Purification:           | Affinity purified   |
| Conjugation:            | Unconjugated  |
| Storage:                | For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.   |
| Stability:              | Shelf life: one year from despatch.   |
| Predicted Protein Size: | 54 kDa  |
| Gene Name:              | thioredoxin reductase 1   |
| Database Link:          | <a href="#">NP_001087240.1</a><br><a href="#">Entrez Gene 7296 Human</a><br><a href="#">Q16881-5</a>  |



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**Background:** The protein encoded by this gene belongs to the pyridine nucleotide-disulfide oxidoreductase family, and is a member of the thioredoxin (Trx) system. Three thioredoxin reductase (TrxR) isozymes are found in mammals. TrxRs are selenocysteine-containing flavoenzymes, which reduce thioredoxins, as well as other substrates, and play a key role in redox homeostasis. This gene encodes an ubiquitously expressed, cytosolic form of TrxR, which functions as a homodimer containing FAD, and selenocysteine (Sec) at the active site. Sec is encoded by UGA codon that normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, the Sec insertion sequence (SECIS) element, which is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. Alternative splicing, primarily at the 5' end, results in transcript variants encoding same or different isoforms, including a glutaredoxin-containing isoform that is predominantly expressed in testis.

**Synonyms:** GRIM-12; KDRF; MGC9145; oxidoreductase; TR; TR1; TRXR1; TXNR

**Protein Families:** Druggable Genome

**Protein Pathways:** Pyrimidine metabolism

### Product images:

