

#### Thioredoxin Reductase 1 (TXNRD1) Antibody

Purified Rabbit Polyclonal Antibody Catalog # ABV11645

# **Specification**

## Thioredoxin Reductase 1 (TXNRD1) Antibody - Product Information

Application WB
Primary Accession O16881

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype rabbit IgG
Calculated MW 70906

## Thioredoxin Reductase 1 (TXNRD1) Antibody - Additional Information

**Gene ID 7296** 

#### **Other Names**

Thioredoxin Reductase, GRIM-12, MGC9145, TR, TR1, TRXR1, TXNR

### Target/Specificity

Thioredoxin Reductase 1 (TXNRD1)

#### **Formulation**

100  $\mu$ g (0.5 mg/ml) of antibody in PBS pH 7.2, 0.01 % BSA, 0.03 % ProClin®, and 50 % glycerol.

#### Handling

The antibody solution should be gently mixed before use.

## **Background Descriptions**

### **Precautions**

Thioredoxin Reductase 1 (TXNRD1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Thioredoxin Reductase 1 (TXNRD1) Antibody - Protein Information

Name TXNRD1 (HGNC:12437)

Synonyms GRIM12, KDRF

#### **Function**

Reduces disulfideprotein thioredoxin (Trx) to its dithiol- containing form (PubMed:<a href="http://www.uniprot.org/citations/8577704" target="\_blank">8577704</a>). Homodimeric flavoprotein involved in the regulation of cellular redox reactions, growth and differentiation. Contains a selenocysteine residue at the C-terminal active site that is essential for catalysis



(Probable). Also has reductase activity on hydrogen peroxide (H2O2) (PubMed:<a href="http://www.uniprot.org/citations/10849437" target=" blank">10849437</a>).

#### **Cellular Location**

[Isoform 1]: Cytoplasm [Isoform 5]: Cytoplasm

#### **Tissue Location**

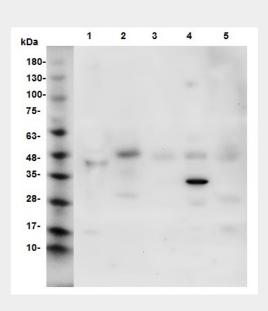
[Isoform 1]: Expressed predominantly in Leydig cells (at protein level). Also expressed in ovary, spleen, heart, liver, kidney and pancreas and in a number of cancer cell lines

#### Thioredoxin Reductase 1 (TXNRD1) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Thioredoxin Reductase 1 (TXNRD1) Antibody - Images



Western blot with human TXNRD1 antibody. Lane1: 22ug human serum; Lane2: 60ug 3T3 cell lysate; Lane3: 22ug mouse muscle; Lane4: 60ugrat kidney; Lane5: 80ug Rat liver.

# Thioredoxin Reductase 1 (TXNRD1) Antibody - Background

Thioredoxin reductase 1 is an enzyme that in humans is encoded by the TXNRD1 gene. This gene encodes a member of the family of pyridine nucleotide oxidoreductases. This protein reduces thioredoxins as well as other substrates, and plays a role in selenium metabolism and protection against oxidative stress. The functional enzyme is thought to be a homodimer which uses FAD as a cofactor. Inhibition of TXNRD1 activity may provide for potential treatments of cancer, AIDS and other autoimmune diseases as well as bacterial infections and parasitic diseases.