

# TXNRD1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP22147c

## Product Information

---

<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q16881</a>
<b>Other Accession</b>	<a href="#">O62768</a> , <a href="#">Q9MYY8</a> , <a href="#">Q5NVA2</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Predicted</b>	Bovine, Pig
<b>Host</b>	Rabbit
<b>Clonality</b>	polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB56182
<b>Calculated MW</b>	70906

## Additional Information

---

<b>Gene ID</b>	7296
<b>Other Names</b>	Thioredoxin reductase 1, cytoplasmic, TR, 1.8.1.9, Gene associated with retinoic and interferon-induced mortality 12 protein, GRIM-12, Gene associated with retinoic and IFN-induced mortality 12 protein, KM-102-derived reductase-like factor, Thioredoxin reductase TR1, TXNRD1, GRIM12, KDRF
<b>Target/Specificity</b>	This TXNRD1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 271-305 amino acids from the Central region of human TXNRD1.
<b>Dilution</b>	WB~~1:2000 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	TXNRD1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

<b>Name</b>	TXNRD1 ( <a href="#">HGNC:12437</a> )
-------------	---------------------------------------

<b>Synonyms</b>	GRIM12, KDRF
<b>Function</b>	Reduces disulfide protein thioredoxin (Trx) to its dithiol- containing form (PubMed: <a href="#">8577704</a> ). Homodimeric flavoprotein involved in the regulation of cellular redox reactions, growth and differentiation. A selenocysteine residue at the C-terminal active site is essential for catalysis (Probable). Also has reductase activity on hydrogen peroxide (H2O2) (PubMed: <a href="#">10849437</a> ).
<b>Cellular Location</b>	[Isoform 1]: Cytoplasm [Isoform 5]: Cytoplasm
<b>Tissue Location</b>	[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

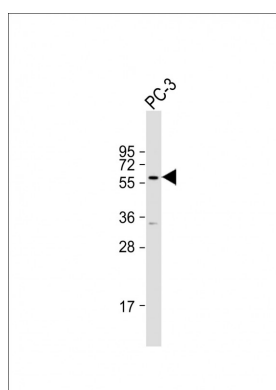
## Background

Isoform 1 may possess glutaredoxin activity as well as thioredoxin reductase activity and induces actin and tubulin polymerization, leading to formation of cell membrane protrusions. Isoform 4 enhances the transcriptional activity of estrogen receptors alpha and beta while isoform 5 enhances the transcriptional activity of the beta receptor only. Isoform 5 also mediates cell death induced by a combination of interferon-beta and retinoic acid.

## References

- Gasdaska P.Y.,et al.FEBS Lett. 373:5-9(1995).  
 Koishi R.,et al.J. Biol. Chem. 272:2570-2577(1997).  
 Hofman E.R.,et al.Mol. Cell. Biol. 18:6493-6504(1998).  
 Rundloef A.-K.,et al.Free Radic. Biol. Med. 36:641-656(2004).  
 Schuetze N.,et al.Submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases.

## Images



Anti-TXNRD1 Antibody (Center) at 1:2000 dilution + PC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 71 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.