

TXNRD1 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22148b

Product Information

| Application | WB, E |
|-------------------|---------------------------------------|
| Primary Accession | <u>Q16881</u> |
| Other Accession | <u>Q9JMH6, Q9MYY8, Q5NVA2, O89049</u> |
| Reactivity | Human, Mouse |
| Predicted | Mouse, Pig, Rat |
| Host | Rabbit |
| Clonality | polyclonal |
| Isotype | Rabbit IgG |
| Clone Names | RB56183 |
| Calculated MW | 70906 |

Additional Information

| Gene ID | 7296 |
|--------------------|--|
| Other Names | 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 |
| Target/Specificity | This TXNRD1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 516-550 amino acids from human TXNRD1. |
| Dilution | WB~~1:2000 E~~Use at an assay dependent concentration. |
| Format | 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. |
| Storage | 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. |
| Precautions | TXNRD1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

Name

TXNRD1 (HGNC:12437)

| Synonyms | GRIM12, KDRF |
|-------------------|--|
| Function | Reduces disulfideprotein thioredoxin (Trx) to its dithiol- containing form (PubMed: <u>8577704</u>). 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: <u>10849437</u>). |
| 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 |

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



All lanes : Anti-TXNRD1 Antibody (C-Term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: Neuro-2a whole cell lysate Lane 3: NIH/3T3 whole cell lysate Lane 4: PC-3 whole cell lysate Lane 5: human testis 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'.