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TXNRD1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22147c

Product Information

Application	WB, E
Primary Accession	Q16881
Other Accession	O62768, Q9MYY8, Q5NVA2
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Pig, Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB56182
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 271-305 amino acids from the Central region of 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 (Center) 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 disulfide protein thioredoxin (Trx) to its dithiol- containing form (PubMed:8577704). 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:10849437).
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

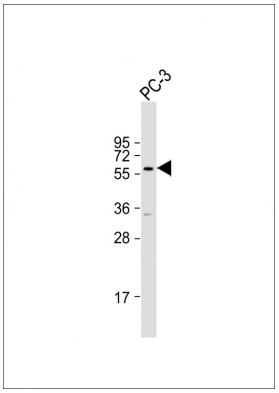
Background

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



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'.