

Anti-TXNRD1 Rabbit Monoclonal Antibody
Catalog # ABO14423**Specification****Anti-TXNRD1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	Q16881
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-TXNRD1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-TXNRD1 Rabbit Monoclonal Antibody - 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, Peroxidase TXNRD1, 1.11.1.2, Thioredoxin reductase TR1, TXNRD1 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=12437), GRIM12, KDRF

Calculated MW

55 kDa KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
IP 1:50
FC 1:120

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human TXNRD1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-TXNRD1 Rabbit Monoclonal Antibody - Protein Information

Name TXNRD1 ([HGNC:12437](#))

Synonyms GRIM12, KDRF

Function

Reduces disulfideprotein thioredoxin (Trx) to its dithiol- containing form (PubMed:8577704). 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: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

Anti-TXNRD1 Rabbit Monoclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TXNRD1 Rabbit Monoclonal Antibody - Images

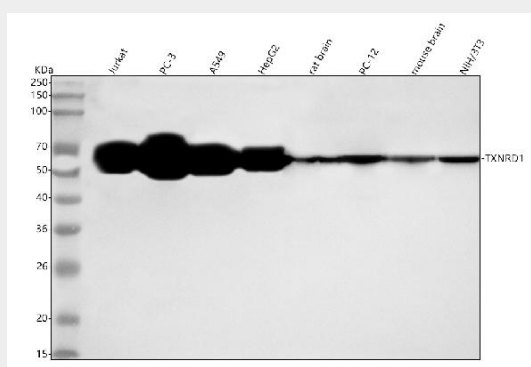


Figure 1. Western blot analysis of TXNRD1 using anti-TXNRD1 antibody (M01778). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,
Lane 2: human PC-3 whole cell lysates,

Lane 3: human A549 whole cell lysates,
Lane 4: human HepG2 whole cell lysates,
Lane 5: rat brain tissue lysates,
Lane 6: rat PC-12 whole cell lysates,
Lane 7: mouse brain tissue lysates,
Lane 8: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TXNRD1 antigen affinity purified monoclonal antibody (Catalog # M01778) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TXNRD1 at approximately 55 kDa. The expected band size for TXNRD1 is at 71 kDa.