

Human Thioredoxin Reductase 1/TRXR1 antibody

Catalog Number: ATGA0451

PRODUCT INFORMATION

Catalog number

ATGA0451

Clone No.

AT30F1

Product type

Monoclonal Antibody

UnitProt No.

Q16881

NCBI Accession No.

NP_001087240

Alternative Names

GRIM 12, KDRF, KM 102 derived reductase like factor, MGC9145, Oxidoreductase, Thioredoxin reductase, Thioredoxin reductase 1, Thioredoxin reductase 1 cytoplasmic, Thioredoxin reductase 1 Gene associated with retinoid IFN induced mortality 12 protein, Thioredoxin reductase GRIM 12, TR, TR 1, TRXR 1, TXNR, TXNRD 1

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human TXNRD1 (161-647aa) purified from E. coli

Isotype

IgG2b kappa

Purification Note

By protein-A affinity chromatography

Application

ELISA, WB, ICC/IF

Usage

The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

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Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

TXNRD1, also known as Thioredoxin reductase 1, is a part of a selenium-containing pyridine nucleotidedisulphide oxidoreductase family, which has a conserved catalytic site of Cys-Val-Asn-Val-Gly-Cys. This protein reduces thioredoxins as well as other substrates, and plays a role in selenium metabolism and protection against oxidative stress. Inhibition of TXNRD1 activity may provide for potential treatments of cancer, AIDS and other autoimmune diseases as well as bacterial infections and parasitic diseases.

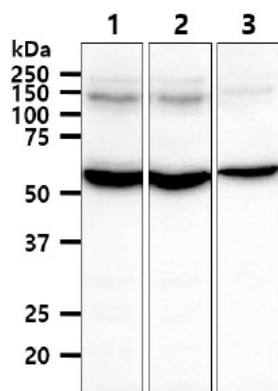
General References

Ma X., et al. (2002) J Biol Chem. 277(25): 22460-8.

Javvadi P (2010) Cancer Res. 70(5): 1941-50.

DATA

Western blot analysis (WB)



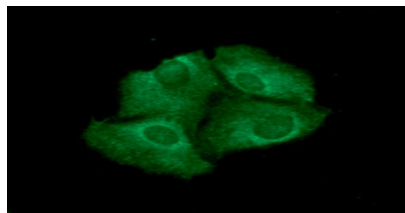
The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human TXNRD1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: HeLa cell lysate

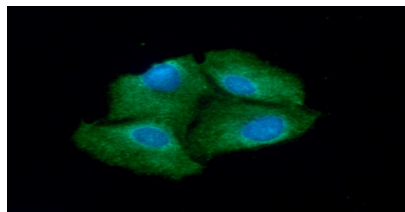
Lane 2.: A549 cell lysate

Lane 3.: PC3 cell lysate

Immunocytochemistry/Immunofluorescence (ICC/IF)

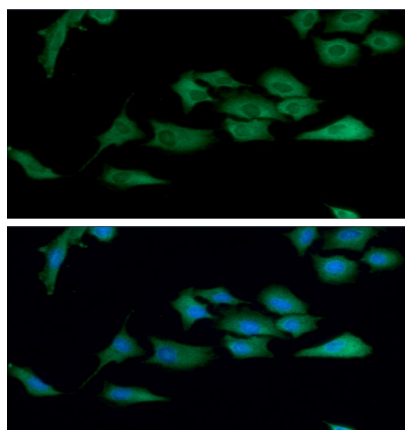


ICC/IF analysis of TXNRD1 in Hep3B cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human TXNRD1 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



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ICC/IF analysis of TXNRD1 in A549 cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human TXNRD1 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).