

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# Trx polyclonal antibody

Catalog: BS60450 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

Thioredoxin (Trx) is a redox protein that is found in several species, such as bacteria, plants and mammals, and contains a conserved active site, consisting of Trp-Cys-Gly-Pro-Cys. Trx has several biological functions. It acts as a hydrogen donor for ribonucleotide reductase, which is critical for DNA synthesis, and modulates the DNA-binding activity of several transcription factors, including NFkB, AP-1, p53, TFIIIC and glucocorticoid receptor. Trx also stimulates cell growth, is an inhibitor of apoptosis and plays a role in the protection against oxidative stress. Drugs that inhibit Trx have antitumor activity, suggesting that Trx is involved in a variety of human diseases, including cancer. Thioredoxin 2 (Trx-2) is a small redox protein that is localized to the mitochondria and is essential for cell viability, playing a crucial role in the scavenging of ROS in mitochondria and regulating the mitochondrial apoptosis signaling pathway. Trx reductases (TrxR1 and TrxR2) are ubiquitously expressed flavoproteins that catalyze the NADPH-dependent reduction of Trx as well as several other oxidized cellular components. Mammalian Trx reductases are a part of a selenium-containing pyridine nucleotide-disulphide oxidoreductase family, which has a conserved catalytic site of Cys-Val-Asn-Val-Gly-Cys. TrxR1 and TrxR2 are also involved in the prevention of oxidative stress. Inhibition of TrxR activity may provide for potential treatments of cancer, AIDS and other autoimmune diseases as well as bacterial infections and parasitic diseases.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

## **Molecular Weight:**

~ 12 kDa

## **Swiss-Prot:**

P10599

### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

WB: 1:500~1:1000

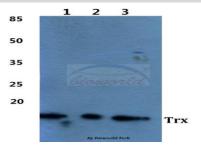
## Storage&Stability:

Store at  $4 \, \mathbb{C}$  short term. Aliquot and store at  $-20 \, \mathbb{C}$  long term. Avoid freeze-thaw cycles.

#### **Specificity:**

Trx polyclonal antibody detects endogenous levels of Trx protein.

#### **DATA:**



Western blot (WB) analysis of Trx polyclonal antibody at 1:500 dilution

Lane1:Hela cell lysate

Lane2:Raw264.7 cell lysate

Lane3:H9C2 cell lysate

#### Note:

For research use only, not for use in diagnostic procedure.

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