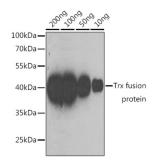
## **Datasheet**

Version: 4.0.0 Revision date: 13 Mar 2025



## **Trx-Tag Antibody**

Catalogue No.:abx005591



Western blot analysis of over-expressed Trx fusion protein using Mouse anti Trx-Tag antibody at 1/5000 dilution. Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) at 1/10000 dilution. Blocking buffer: 3% nonfat dry milk in TBST.

Trx-Tag Antibody is a Mouse Monoclonal antibody against Trx-Tag. 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.

Target: Trx-Tag

Clonality: Monoclonal

Reactivity: General

Tested Applications: ELISA, WB

Host: Mouse

Recommended dilutions: ELISA: 1 µg/ml, WB: 1/2000 - 1/5000. Optimal dilutions/concentrations should be determined by

the end user.

Conjugation: Unconjugated

Immunogen: Recombinant protein of Trx tag

**Isotype**: IgG<sub>1</sub>

Form: Liquid

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**Purification:** Purified by affinity chromatography.

**Storage:** Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

**Buffer:** PBS, pH 7.3, containing 0.02% sodium azide, 50% glycerol.

**Concentration:** > 0.2 mg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY, NOT FOR USE IN DIAGNOSTIC.

THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL

CONSUMPTION.