Thioredoxin 2 (4C5) Monoclonal Antibody

ALTERNATE NAMES: MTRX, TRX2, MT-TRX.

CATALOG #: 6167-100

AMOUNT: 100 µl

HOST: Mouse

ISOTYPE: IgG1

IMMUNOGEN: Recombinant human protein purified from E.coli

PURIFICATION: Ammonium sulphate precipitation

FORM: Liquid

FORMULATION: 100 µl of antibody in HEPES with 0.15 M NaCl, 0.01 % BSA, 0.03 % sodium azide, and 50 % glycerol

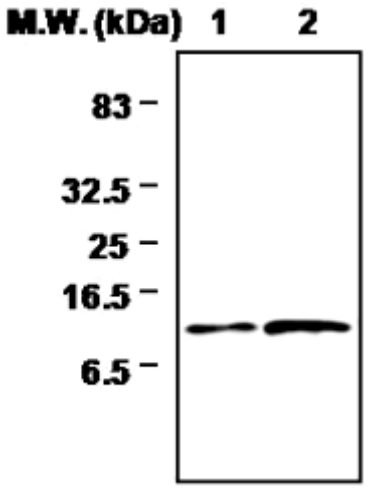
SPECIES REACTIVITY: Human, Mouse, Rat

STORAGE CONDITIONS: Store for 1 year at -20°C from date of shipment. Avoid repeated freeze/thaw cycles.

DESCRIPTION: The mammalian thioredoxin reductases (TrxRs) are a family of seleno-cysteine containing pyridine nucleotide-disulfide oxido-reductases. All the mammalian TrxRs are homologous to glutathione reductase with respect to primary structure including the conserved redox catalytic site (-Cys-Val-Asn-Val-Gly-Cys-) but distinctively with a C-terminal extension containing a catalytically active penultimate seleno-cysteine (SeCys) residue in the conserved sequence(-Gly-Cys-SeCys-Gly). TrxR is homodimeric protein in which each monomer includes an FAD prosthetic group, a NADPH binding site and a redox catalytic site. Electrons are transferred from NADPH via FAD and the active-site disulfide to C-terminal SeCys-containing redox center, which then reduces the substrate like thioredoxin. The members of TrxR family are 55 – 58 kDa in molecular size and composed of three isoforms including cytosolic TrxR1, mitochondrial TrxR2, and TrxR3, known as Trx and GSSG reductase (TGR). TrxR plays a key role in protection of cells against oxidative stress and redox-regulatory mechanism of transcription factors and various biological phenomena. Trx 2 Has an anti-apoptotic function and plays an important role in the regulation of mitochondrial membrane potential. Could be involved in the resistance to anti-tumor agents. Possesses a dithiol-reducing activity.

APPLICATION: Western blot: 1 µg/ml, IP: 2 µg.

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.



IP analysis of 293T cell lysates.
Lane 1: Input.
Lane 2: Precipitated sample.

RELATED PRODUCTS:

- Thioredoxin Reductase 1 (19A1) Monoclonal Antibody **(Cat. No. 6164-100)**
- Thioredoxin Reductase 2 (7B2) Monoclonal Antibody **(Cat. No. 6165-100)**
- Thioredoxin 1 (3A1) Monoclonal Antibody **(Cat. No. 6166-100)**
- Thioredoxin Reductase Assay kit **(Cat. No. K763-100)**
- Human Recombinant Thioredoxin 1 **(Cat. No. 6305-100)**
- Human Recombinant Thioredoxin 2 **(Cat. No. 6318-100)**
- E. Coli Recombinant Thioredoxin 1 **(Cat. No. 6329-50)**
- E. Coli Recombinant TRXB **(Cat. No. 6331-100)**

FOR RESEARCH USE ONLY! Not to be used on humans.

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