

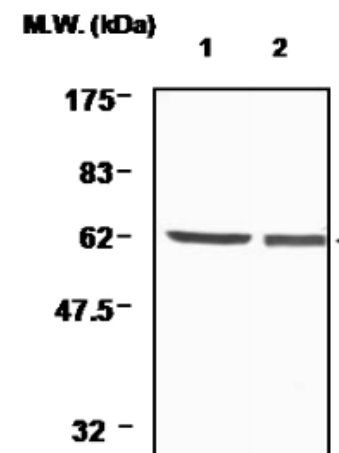
Thioredoxin Reductase 1 (19A1) Monoclonal Antibody

ALTERNATE NAMES:	Thioredoxin Reductase, GRIM-12, MGC9145, TR, TR1, TRXR1, TXNR.
CATALOG #:	6164-100
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
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. TrxR1 plays a central role as a glucosyl donor in cellular metabolic pathways.

APPLICATION: Western blot: 1:1000, IP: 1-2 µl, ELISA.

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



WB analysis of cell lysates.
Lane 1: HeLa cells. Lane 2: Jurkat cells.

RELATED PRODUCTS:

- Thioredoxin Reductase 2 (7B2) Monoclonal Antibody (**Cat. No. 6165-100**)
- Thioredoxin 1 (3A1) Monoclonal Antibody (**Cat. No. 6166-100**)
- Thioredoxin 2 (4C5) Monoclonal Antibody (**Cat. No. 6167-100**)
- 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.