ARG59280
anti-Thioredoxin Reductase 1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Thioredoxin Reductase 1
Tested Reactivity	Hu, Ms
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Thioredoxin Reductase 1
Species	Human
Immunogen	Synthesized peptide derived from Human Thioredoxin Reductase 1.
Conjugation	Un-conjugated
Alternate Names	Thioredoxin reductase 1, cytoplasmic; EC 1.8.1.9; Gene associated with retinoic and IFN-induced mortality 12 protein; Gene associated with retinoic and interferon-induced mortality 12 protein; TR; TXNR; TRXR1; KM-102-derived reductase-like factor; TR1; GRIM-12; Thioredoxin reductase TR1

Application Instructions

Application table

Application	Dilution
WB	1:500 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: 55 kDa

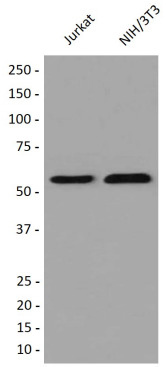
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TXNRD1
Gene Full Name	thioredoxin reductase 1
Background	This gene encodes a member of the family of pyridine nucleotide oxidoreductases. This protein reduces thioredoxins as well as other substrates, and plays a role in selenium metabolism and protection against oxidative stress. The functional enzyme is thought to be a homodimer which uses FAD as a cofactor. Each subunit contains a selenocysteine (Sec) residue which is required for catalytic activity. The selenocysteine is encoded by the UGA codon that normally signals translation termination. The 3' UTR of selenocysteine-containing genes have a common stem-loop structure, the sec insertion sequence (SECIS), that is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. Alternative splicing results in several transcript variants encoding the same or different isoforms. [provided by RefSeq, Jul 2008]
Function	Isoform 1 may possess glutaredoxin activity as well as thioredoxin reductase activity and induces actin and tubulin polymerization, leading to formation of cell membrane protrusions. Isoform 4 enhances the transcriptional activity of estrogen receptors alpha and beta while isoform 5 enhances the transcriptional activity of the beta receptor only. Isoform 5 also mediates cell death induced by a combination of interferon-beta and retinoic acid. [UniProt]
Calculated Mw	71 kDa
PTM	The N-terminus of isoform 5 is blocked. ISGylated. [UniProt]
Cellular Localization	Cytoplasm. Isoform 4: Cytoplasm. Nucleus. Isoform 5: Cytoplasm. [UniProt]

Images



ARG59280 anti-Thioredoxin Reductase 1 antibody WB image

Western blot: Jurkat and NIH/3T3 cell lysates stained with ARG59280 anti-Thioredoxin Reductase 1 antibody.