

## ARG59281 anti-TRX / Thioredoxin antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes TRX / Thioredoxin
Tested Reactivity	Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TRX / Thioredoxin
Species	Mouse
Immunogen	Recombinant protein corresponding to V2-A105 of Mouse Thioredoxin.
Conjugation	Un-conjugated
Alternate Names	ATL-derived factor; TRX1; SASP; Trx; ADF; TRX; Surface-associated sulphhydryl protein; TRDX; Thioredoxin

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:200 - 1:1000
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	12 kDa	

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
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 or below. 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.

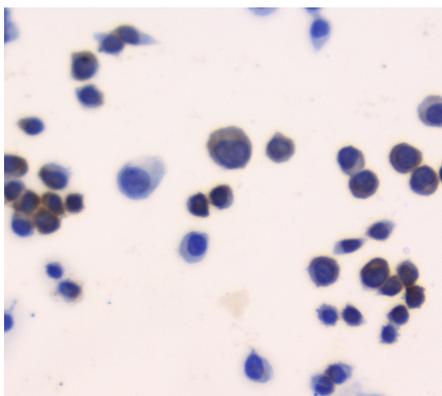
## Bioinformation

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Gene Symbol	TXN
Gene Full Name	thioredoxin
Background	The protein encoded by this gene acts as a homodimer and is involved in many redox reactions. The encoded protein is active in the reversible S-nitrosylation of cysteines in certain proteins, which is part of the response to intracellular nitric oxide. This protein is found in the cytoplasm. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]
Function	Participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyzes dithiol-disulfide exchange reactions. Plays a role in the reversible S-nitrosylation of cysteine residues in target proteins, and thereby contributes to the response to intracellular nitric oxide. Nitrosylates the active site Cys of CASP3 in response to nitric oxide (NO), and thereby inhibits caspase-3 activity. Induces the FOS/JUN AP-1 DNA-binding activity in ionizing radiation (IR) cells through its oxidation/reduction status and stimulates AP-1 transcriptional activity.  ADF augments the expression of the interleukin-2 receptor TAC (IL2R/P55). [UniProt]
Calculated Mw	12 kDa
PTM	In the fully reduced protein, both Cys-69 and Cys-73 are nitrosylated in response to nitric oxide (NO). When two disulfide bonds are present in the protein, only Cys-73 is nitrosylated. Cys-73 can serve as donor for nitrosylation of target proteins.  In case of infection, ubiquitinated by S.typhimurium protein slrP, leading to its degradation. [UniProt]
Cellular Localization	Nucleus. Cytoplasm. Secreted. Note=Translocates from the cytoplasm into the nucleus after phorbol 12-myristate 13-acetate induction (PMA) (PubMed:9108029). Predominantly in the cytoplasm in non irradiated cells (PubMed:11118054). Radiation induces translocation of TRX from the cytoplasm to the nucleus (PubMed:11118054). Secreted by a leaderless secretory pathway (PubMed:1332947). [UniProt]

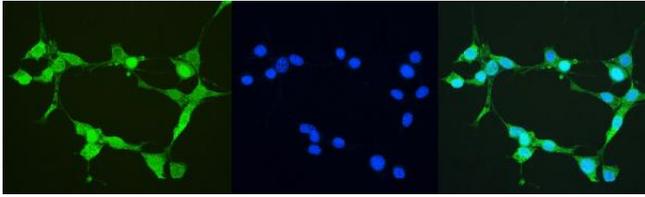
## Images

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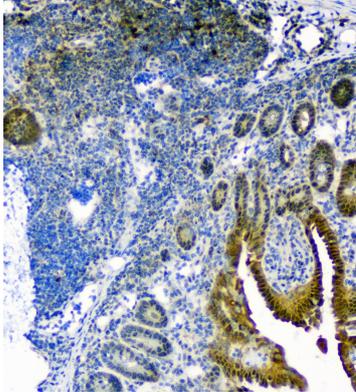
ARG59281 anti-TRX / Thioredoxin antibody ICC image

Immunocytochemistry: LLC cells stained with ARG59281 anti-TRX / Thioredoxin antibody.



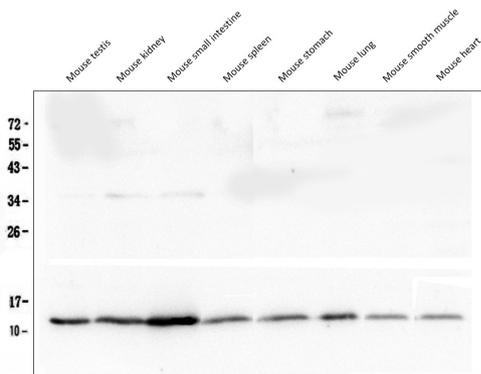
#### ARG59281 anti-TRX / Thioredoxin antibody ICC/IF image

Immunofluorescence: NIH/3T3 cells were blocked with 10% goat serum and then stained with ARG59281 anti-TRX / Thioredoxin antibody (green) at 2  $\mu\text{g}/\text{ml}$  dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



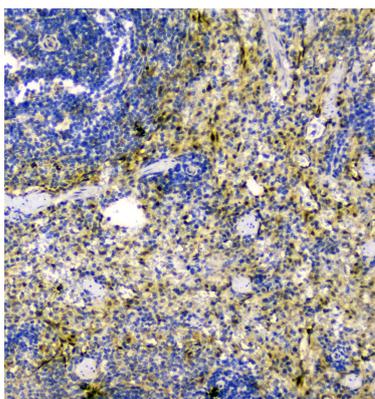
#### ARG59281 anti-TRX / Thioredoxin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse small intestine tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59281 anti-TRX / Thioredoxin antibody at 1  $\mu\text{g}/\text{ml}$  dilution, overnight at 4°C.



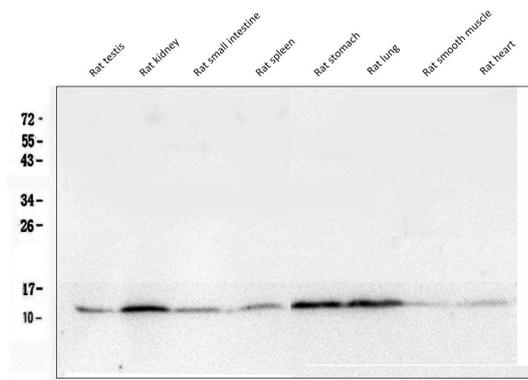
#### ARG59281 anti-TRX / Thioredoxin antibody WB image

Western blot: 50  $\mu\text{g}$  of samples under reducing conditions. Mouse testis, Mouse kidney, Mouse small intestine, Mouse spleen, Mouse stomach, Mouse lung, Mouse smooth muscle and Mouse heart lysates stained with ARG59281 anti-TRX / Thioredoxin antibody at 0.5  $\mu\text{g}/\text{ml}$  dilution, overnight at 4°C.



#### ARG59281 anti-TRX / Thioredoxin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded rat spleen tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59281 anti-TRX / Thioredoxin antibody at 1  $\mu\text{g}/\text{ml}$  dilution, overnight at 4°C.



#### ARG59281 anti-TRX / Thioredoxin antibody WB image

Western blot: 50 µg of samples under reducing conditions. Rat testis, Rat kidney, Rat small intestine, Rat spleen, Rat stomach, Rat lung, Rat smooth muscle and Rat heart lysates stained with ARG59281 anti-TRX / Thioredoxin antibody at 0.5 µg/ml dilution, overnight at 4°C.