

Rabbit anti-Mouse, Rat Thioredoxin/TRX/Txn Polyclonal Antibody | anti-TRX antibody

Anti-Thioredoxin/TRX/Txn Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124919	Rabbit	Mouse, Rat	ELISA, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Thioredoxin/TRX/Txn; Polyclonal Antibody; Anti-Thioredoxin/TRX/Txn Antibody; Thioredoxin; Trx; ATL-derived factor; ADF; Txn; Txn1; Thioredoxin 1; anti-TRX antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized
Sequence Length	105
Applicable Applications for anti-TRX antibody	ELISA (Direct ELISA), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived mouse Thioredoxin TRX recombinant protein (Position: V2-A105).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Relevant Detection Systems	It is recommended to use an Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC-P and ICC.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohiostchemistry)

Figure 3. IHC analysis of Thioredoxin TRX using anti-Thioredoxin TRX antibody. Thioredoxin TRX was detected in paraffin-embedded section of mouse small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Thioredoxin TRX antibody. Thioredoxin TRX was detected in paraffin-embedded section of mouse small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Thioredoxin TRX antibody. Thioredoxin TRX was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Thioredoxin TRX antibody. Thioredoxin TRX was detected in immunocytochemical section of LLC cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Thioredoxin TRX Antibody overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Thioredoxin TRX using anti-Thioredoxin TRX antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse testis tissue lysates, Lane 2: mouse kidney tissue lysates, Lane 3: mouse small intestine tissue lysates, Lane 4: mouse spleen tissue lysates, Lane 5: mouse stomach tissue lysates, Lane 6: mouse lung tissue lysates, Lane 7: mouse smooth muscle tissue lysates, Lane 8: mouse heart tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Thioredoxin TRX antigen affinity purified polyclonal antibody at 0.5 ug/ml overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Thioredoxin TRX at approximately 12KD. The expected band size for Thioredoxin TRX is at 12KD.

ADDITIONAL INFORMATION

Related Product Information for anti-TRX antibody	<p>Description: Rabbit IgG polyclonal antibody for Thioredoxin TRX detection. Tested with WB, IHC-P, ICC, Direct ELISA in Mouse; Rat.</p> <p>Background: Thioredoxin is a class of small redox proteins known to be present in all organisms. It is mapped to 9q31.3. 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.</p>
References	<p>1. Benhar, M., Forrester, M. T., Hess, D. T., Stamler, J. S. Regulated protein denitrosylation by cytosolic and mitochondrial thioredoxins. Science 320: 1050-1054, 2008. 2. Im, J.-Y., Lee, K.-W., Woo, J.-M., Junn, E., Mouradian, M. M. DJ-1 induces thioredoxin 1 expression through the Nrf2 pathway. Hum. Molec. Genet. 21: 3013-3024, 2012.</p>

NCBI AND UNIPROT INFORMATION

NCBI GI #	6755911
NCBI GeneID	22166
NCBI Accession #	NP_035790.1
NCBI GenBank Nucleotide #	NM_011660.3
UniProt Accession #	P10639; Q52KC4; Q9D8R0
Molecular Weight	11,675 Da
NCBI Official Full Name	thioredoxin
NCBI Official Synonym Full Names	thioredoxin 1
NCBI Official Symbol	Txn1
NCBI Official Synonym Symbols	ADF; Txn; Trx1; AW550880
NCBI Protein Information	thioredoxin
UniProt Protein Name	Thioredoxin

UniProt Gene Name	Txn
UniProt Synonym Gene Names	Txn1; Trx; ADF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/thioredoxin-trx-txn-antibody-direct-elisa-immunocytochemistry-immunohistochemistry-western-blot-elisa/124919>