SunLong Biotech Co.,LTD
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Rabbit Anti-Thioredoxin antibody

SL0458R

Product Name	Thioredoxin
Chinese Name	硫氧还蛋白抗体
Alias	ADF; Surface associated sulphydryl protein; Thioredoxin-1; Thioredoxin 1; Thioredoxin1; TXN ATL derived factor; DKFZp686B1993; MGC61975; SASP; Surface associated sulphydryl prote Surface-associated sulphydryl protein; Thioredoxin; TRDX; TRX 1; TRX; TRX1; TXN; TXN; factor; ATL-derived factor; THIO_HUMAN; zgc:92903.
Product Type	Tag anti
Research Area	Tumour Cell biology immunology Signal transduction transcriptional regulatory factor
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse,Rat
Applications	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,Flow-Cyt=1μg/Test,ELI （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	12kDa
Cellular localization	The nucleus cytoplasmic Secretory protein
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Thioredoxin: 51-105/105
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or d

applications.

PubMed PubMed

The protein encoded by this gene acts as a homodimer and is involved in many redox reactions. protein is active in the reversible S-nitrosylation of cysteines in certain proteins, which is part of intracellular nitric oxide. This protein is found in the cytoplasm. Two transcript variants encodin isoforms have been found for this gene. [provided by RefSeq, Oct 2011]

Product Detail

Function:
Participates in various redox reactions through the reversible oxidation of its active center dithiol catalyzes dithiol-disulfide exchange reactions. Plays a role in the reversible S-nitrosylation of cy target proteins, and thereby contributes to the response to intracellular nitric oxide. Nitrosylates t of CASP3 in response to nitric oxide (NO), and thereby inhibits caspase-3 activity. Induces the D DNA-binding activity in ionizing radiation (IR) cells through its oxidation/reduction status and s transcriptional activity.

Subunit:
Homodimer; disulfide-linked. Interacts with TXNIP through the redox-active site. Interacts with CASP3. In case of infection, interacts with S.typhimurium protein slrP. Interacts with APEX1; t stimulates the FOS/JUN AP-1 DNA-binding activity in a redox-dependent manner.

Subcellular Location:
Nucleus. Cytoplasm. Secreted. Note=Secreted by a leaderless secretory pathway. Predominantly in non irradiated cells. Radiation induces translocation of TRX from the cytoplasm to the nucleu

Similarity:
Belongs to the thioredoxin family. Contains 1 thioredoxin domain.

SWISS:
P10599

Gene ID:
7295

Database links:

Entrez Gene: 7295 Human

Entrez Gene: 22166 Mouse

Entrez Gene: 116484 Rat

Omim: 187700 Human

SwissProt: P10599 Human

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SwissProt: P10639 Mouse

SwissProt: P11232 Rat

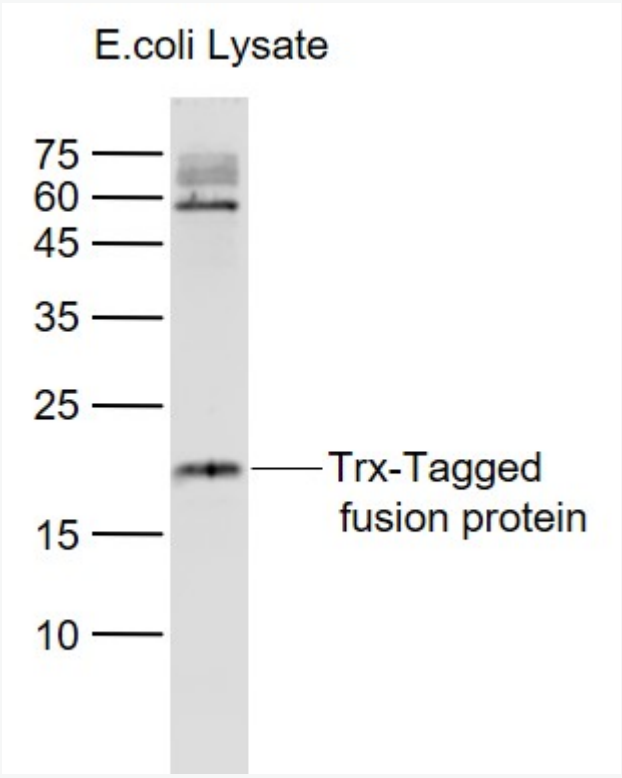
Unigene: 435136 Human

Unigene: 260618 Mouse

Unigene: 29777 Rat

硫氧还蛋白(Thioredoxin，Trx)是一类广泛存在于生物体内的多功能酸性蛋白，分子量约
小分子含硒蛋白质,参与细胞的一系列生化反应，包括酶活性的调节、转录因子的调控等，
力调节蛋白。
硫氧还蛋白的功能绝大多数是依赖于硫氧还蛋白还原靶蛋白中的二硫键。所有硫氧还蛋白
的活性中心，Trp-Cys-Gly(Ala)-Pro-Cys，活性中心有两个具有氧还活性的半胱氨酸残基。

Product Picture



Sample:

Lane 1: Trx-Tagged fusion protein (full length) Overexpression E.coli Lysate (Cat#: SL33018

Primary: Anti-Thioredoxin/Trx (SL0458R) at 1/1000 dilution

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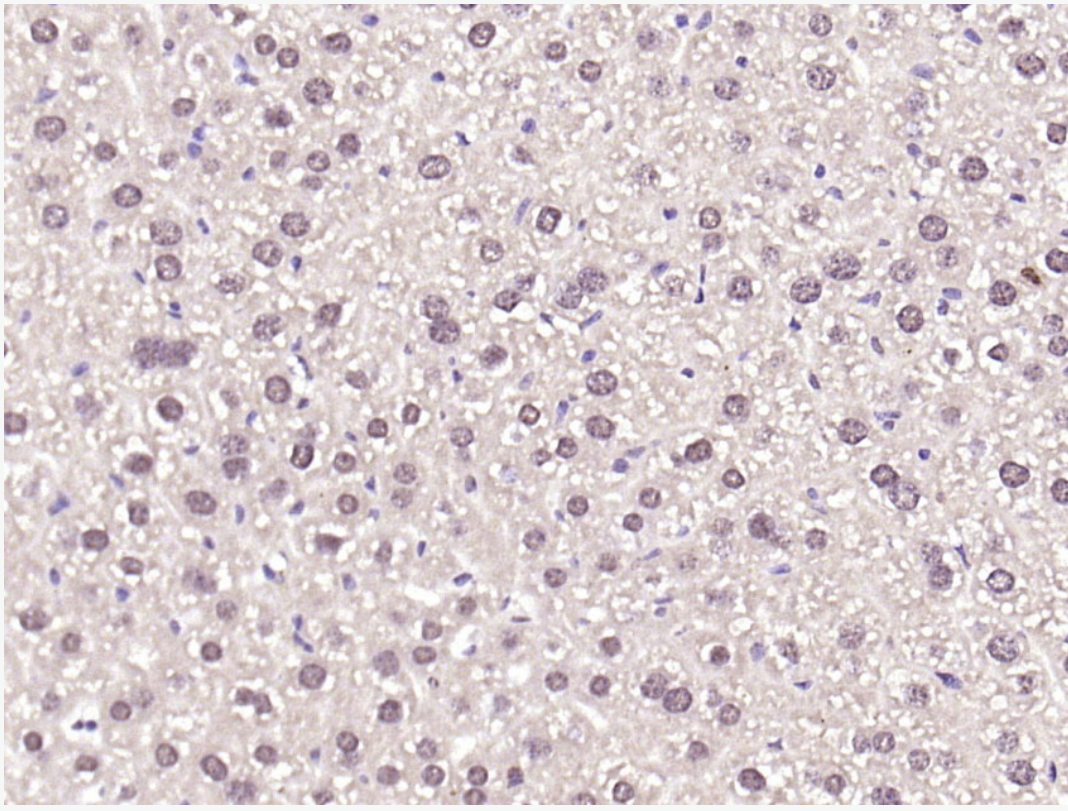
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 18 kD

Observed band size: 18 kD



Paraformaldehyde-fixed, paraffin embedded (mouse liver); Antigen retrieval by boiling in sod
buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min
buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Thioredoxin) Polyc
Unconjugated (SL0458R) at 1:200 overnight at 4°C, followed by operating according to SP K
(sp-0023) instructionsand DAB staining.

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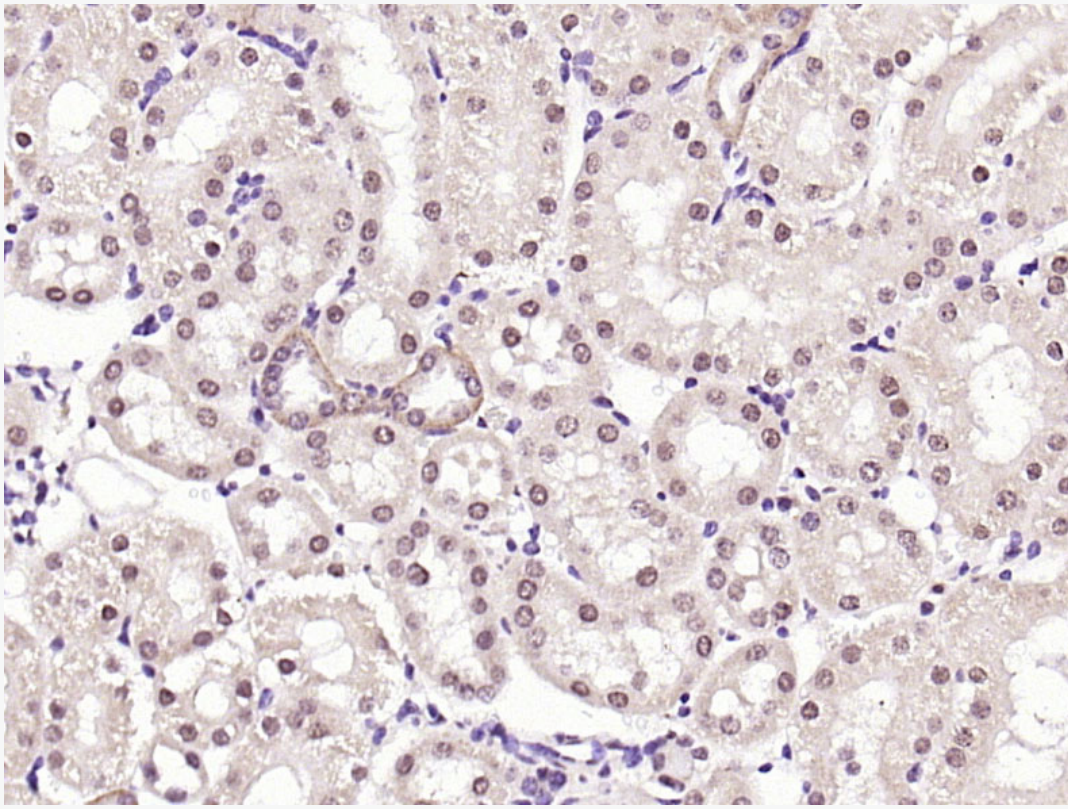

Paraformaldehyde-fixed, paraffin embedded (mouse kidney); Antigen retrieval by boiling in s
buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min
buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Thioredoxin) Polyc
Unconjugated (SL0458R) at 1:200 overnight at 4°C, followed by operating according to SP K
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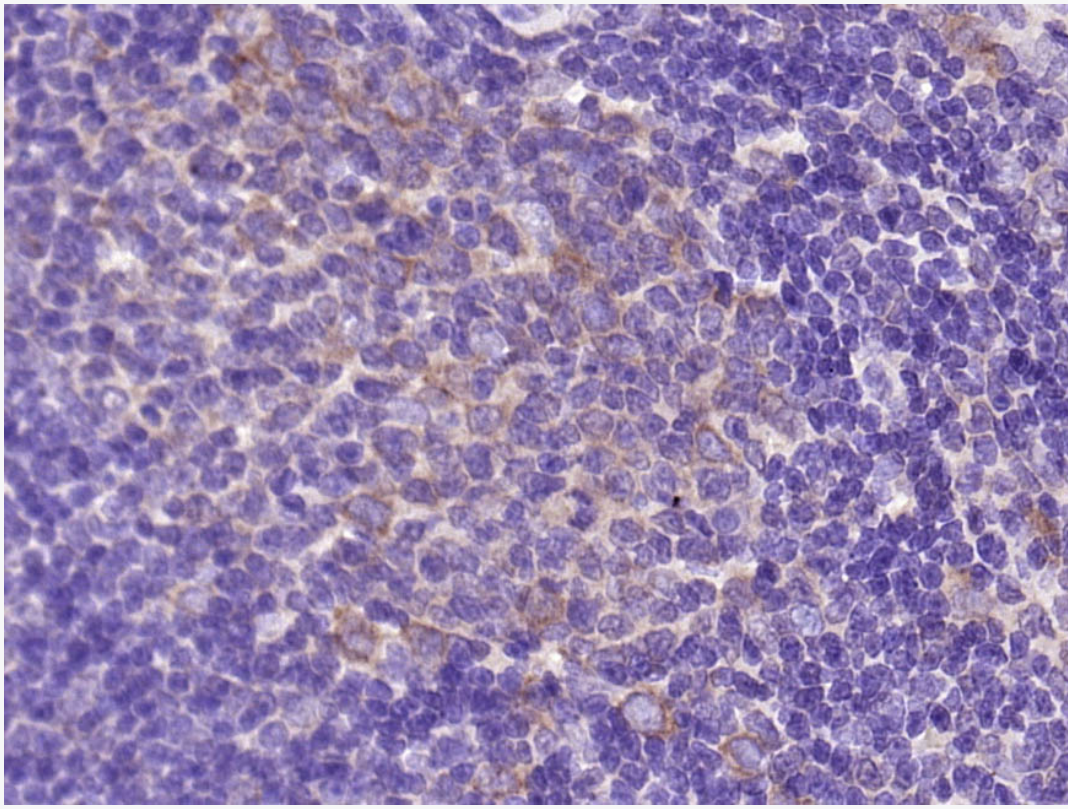

Paraformaldehyde-fixed, paraffin embedded (rat spleen); Antigen retrieval by boiling in sodiu
(pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; B
(normal goat serum) at 37°C for 30min; Antibody incubation with (Thioredoxin) Polyclonal A
Unconjugated (SL0458R) at 1:200 overnight at 4°C, followed by operating according to SP K
(sp-0023) instructionsand DAB staining.

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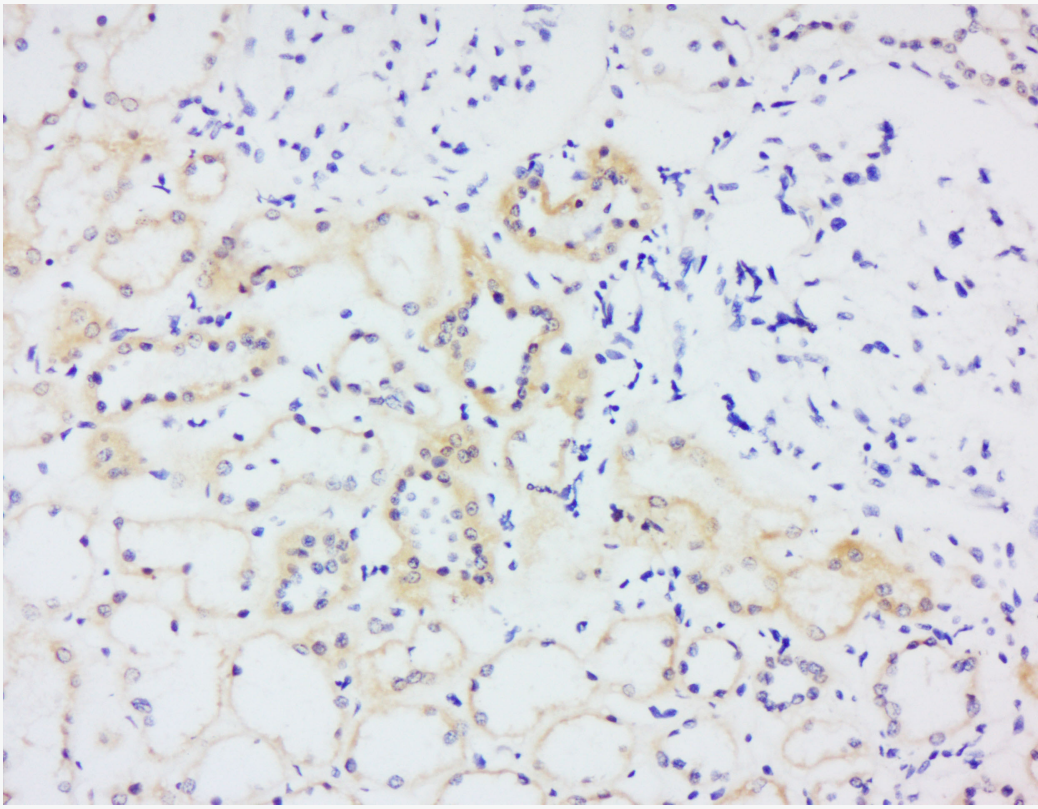

Paraformaldehyde-fixed, paraffin embedded (human kidney); Antigen retrieval by boiling in s
buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min
buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Thioredoxin) Polyc
Unconjugated (SL0458R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-
minutes and DAB staining.

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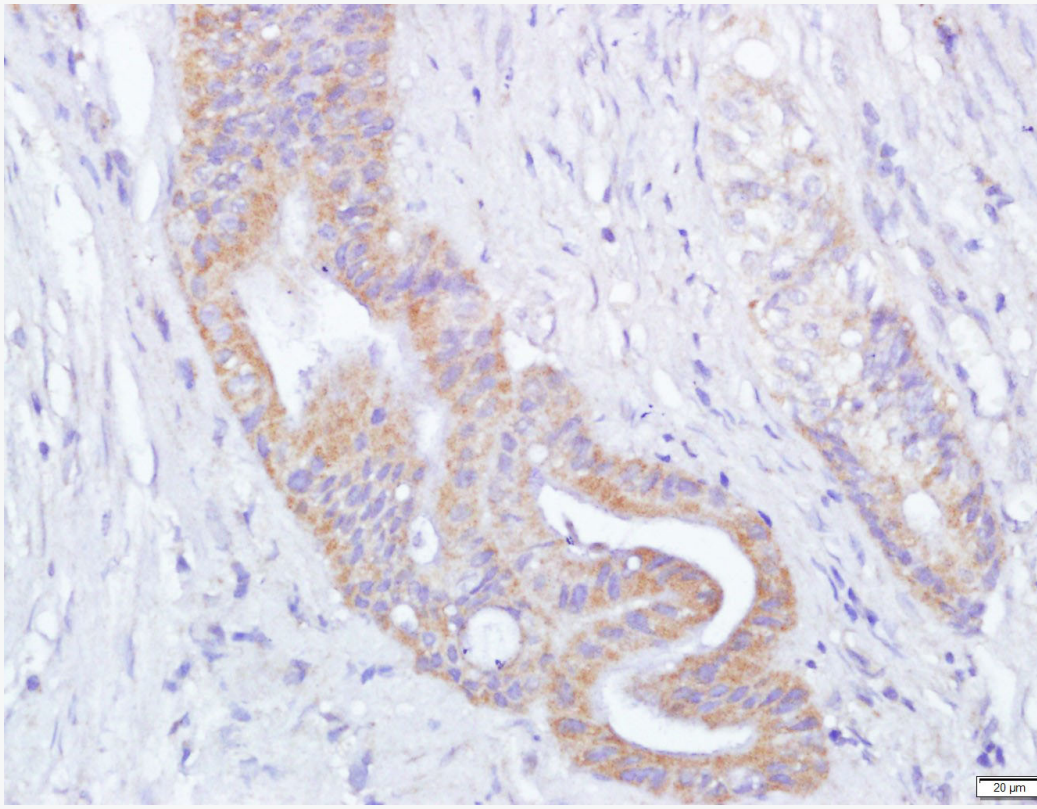

Paraformaldehyde-fixed, paraffin embedded (human cervical carcinoma); Antigen retrieval by sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen perox minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Polyclonal Antibody, Unconjugated (SL0458R) at 1:400 overnight at 4°C, followed by a conj secondary (sp-0023) for 20 minutes and DAB staining.

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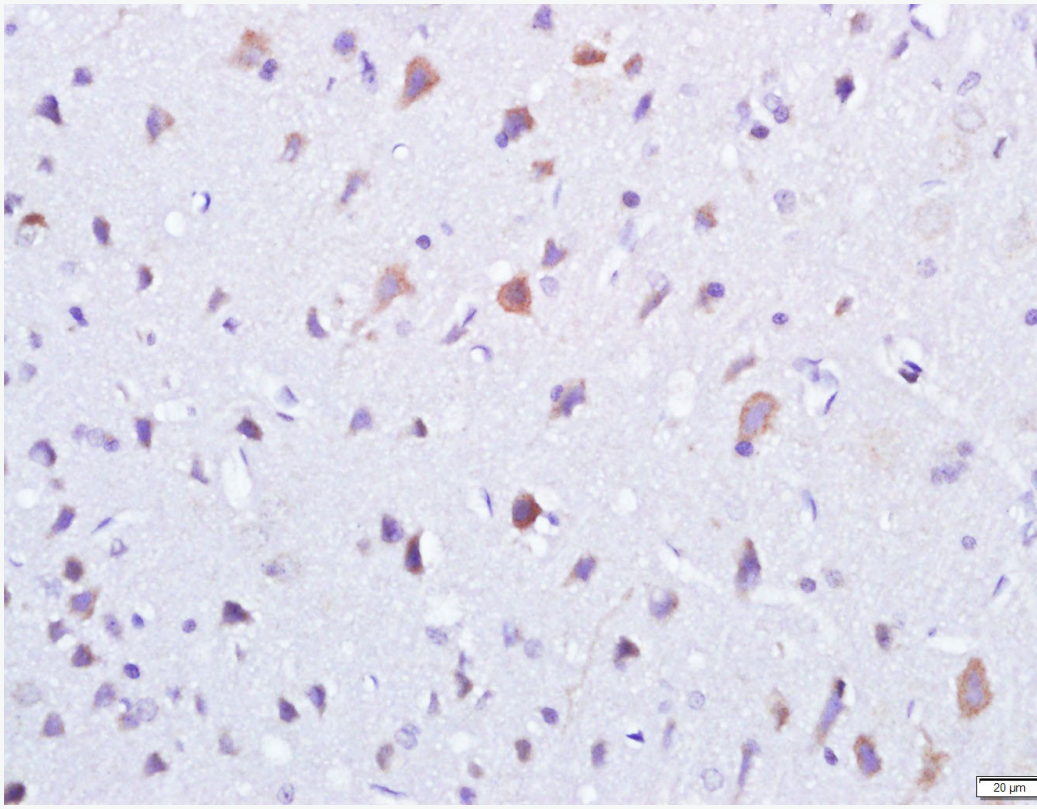

Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodiun
(pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; B
(normal goat serum) at 37°C for 30min; Antibody incubation with (Thioredoxin) Polyclonal A
Unconjugated (SL0458R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-
minutes and DAB staining.

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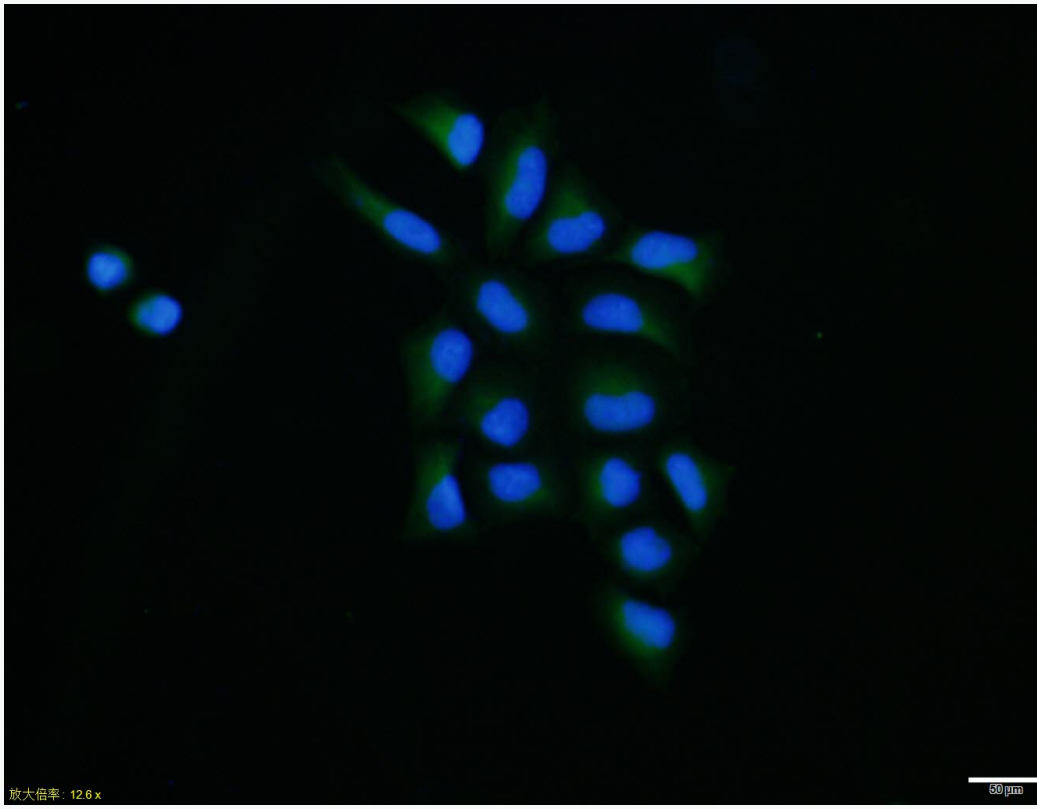

Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Thioredoxin) polyclonal A Unconjugated (SL0458R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rab antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

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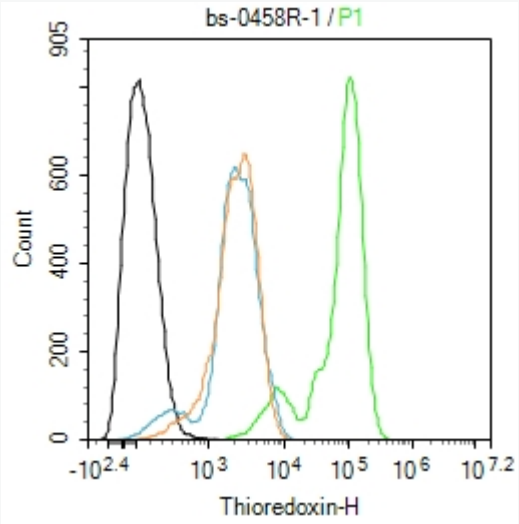

Blank control: SHSY5Y.

Primary Antibody (green line): Rabbit Anti-Thioredoxin antibody (SL0458R)

Dilution: 1ug/Test;

Secondary Antibody : Goat anti-rabbit IgG-FITC

Dilution: 0.5ug/Test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 9

methanol for 20 min at -20℃.The cells were then incubated in 5%BSA to block non-specific

interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min a

temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,

performed.