

# Product Datasheet

## Thioredoxin-1 Antibody - BSA Free NBP2-52983

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

[www.novusbio.com](http://www.novusbio.com)



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### Publications: 1

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**NBP2-52983**

## Thioredoxin-1 Antibody - BSA Free

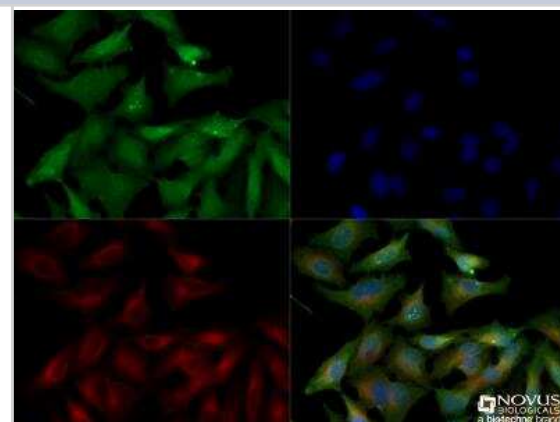
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS

Product Description	
Description	Novus Biologicals Rabbit Thioredoxin-1 Antibody - BSA Free (NBP2-52983) is a polyclonal antibody validated for use in IHC, WB, Flow and ICC/IF. Anti-Thioredoxin-1 Antibody: Cited in 1 publication. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	7295
Gene Symbol	TXN
Species	Human, Mouse
Immunogen	Full length recombinant human Thioredoxin protein (amino acids 1-105) [UniProt P10599]

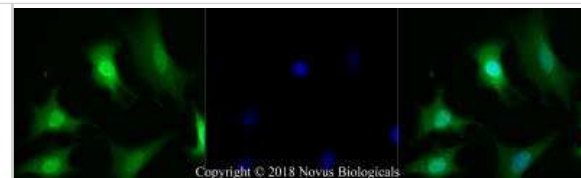
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1 - 2 ug/ml, Flow Cytometry 1:1000, Immunohistochemistry 1:250 - 1:500, Immunocytochemistry/ Immunofluorescence 10 ug/ml, Immunohistochemistry-Paraffin 1:250 - 1:500

**Images**

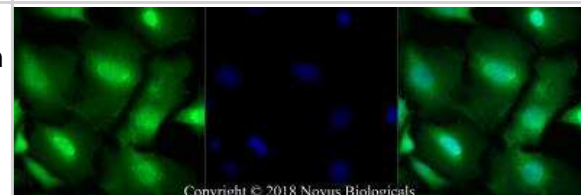
Immunocytochemistry/Immunofluorescence: Thioredoxin Antibody [NBP2-52983] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton-X100. The cells were incubated with anti-Thioredoxin at a 1:100 dilution overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:500 dilution. Alpha tubulin (DM1A) [NB100-690] was used as a co-stain at a 1:1000 dilution and detected with an anti-mouse Dylight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



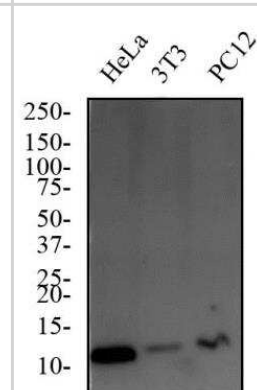
**Immunocytochemistry/Immunofluorescence: Thioredoxin Antibody [NBP2-52983]** - NIH-3T3 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton-X100. The cells were incubated with anti-Thioredoxin at 5 ug/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



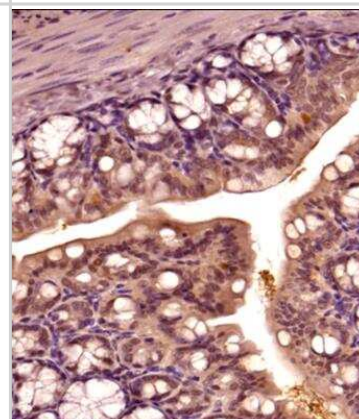
**Immunocytochemistry/Immunofluorescence: Thioredoxin Antibody [NBP2-52983]** - PC12 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton-X100. The cells were incubated with anti-Thioredoxin at 5 ug/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



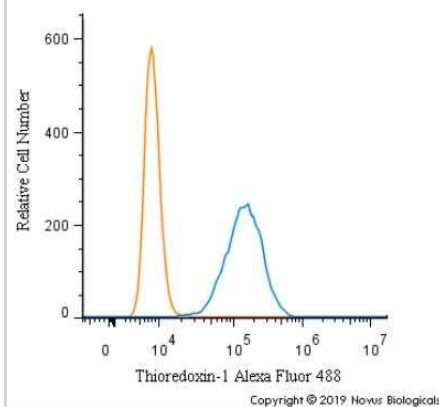
**Western Blot: Thioredoxin Antibody [NBP2-52983]** - Total protein from human HeLa cells, mouse 3T3 cells and rat PC12 cells was separated on a 4-15% gel by SDS-PAGE, transferred to 0.2 um pore size PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 2.0 ug/ml anti-Thioredoxin in 1% non-fat milk in TBST and detected with an anti-rabbit HRP secondary antibody using chemiluminescence.



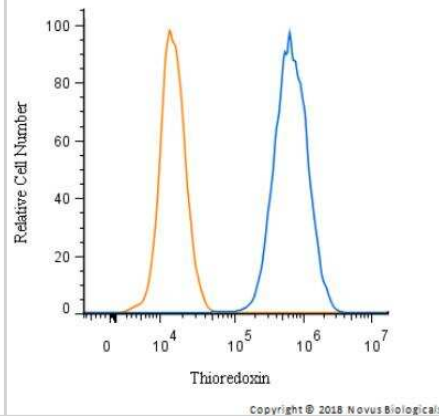
**Immunohistochemistry-Paraffin: Thioredoxin Antibody [NBP2-52983]** - IHC analysis of a formalin fixed and paraffin embedded tissue section of mouse intestine using rabbit polyclonal antibody against Thioredoxin (1:300 dilution). The signal was developed with HRP-secondary -DAB method and the sections were counter-stained using hematoxylin. The staining was found primarily in the epithelial cells of the intestinal lumen with weak to negligible signal in the basal or muscular layers. Isolated epithelial cells depicted nuclear positivity also.



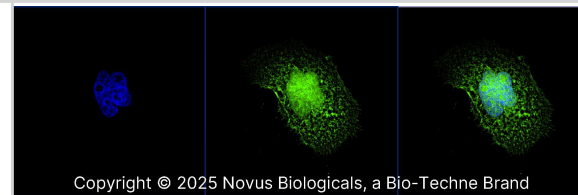
Flow Cytometry: Thioredoxin-1 Antibody [NBP2-52983] - An intracellular stain was performed on HeLa cells with Thioredoxin-1 Antibody NBP2-52983AF488 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 488.



Flow Cytometry: Thioredoxin-1 Antibody [NBP2-52983] - Thioredoxin Antibody [NBP2-52983] - An intracellular stain was performed on U-87 MG cells with Thioredoxin Antibody NBP2-52983 and a matched isotype control. Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature, followed by Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody.



Thioredoxin-1 was detected in immersion fixed A431 human skin carcinoma cell line using Rabbit anti-Thioredoxin-1 Affinity Purified Polyclonal Antibody conjugated to Alexa Fluor® 488 (Catalog # NBP2-52983AF488) (green) at 10 µg/mL overnight at 4C. Cells were counterstained with DAPI (blue). Cells were imaged using a 100X objective and digitally deconvolved.



## Publications

Shi Y, Jin Y, Liu F et al. Ceramide induces the apoptosis of non small cell lung cancer cells through the Txnip/Trx1 complex International journal of molecular medicine 2021-05-01 [PMID: 33760130] (WB, ICC/IF, Human)



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### **Products Related to NBP2-52983**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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