TrxR1 Monoclonal Antibody (19A1)

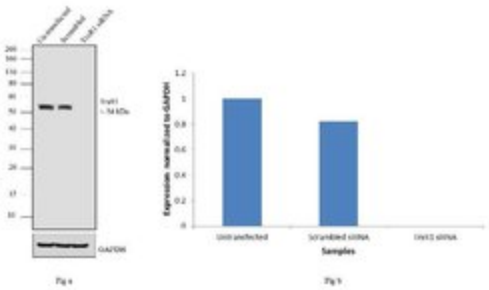
Product Details	
Size	100 µL
Species Reactivity	Human
Published Species	Human
Host/Isotope	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	19A1
Conjugate	Unconjugated
Immunogen	Purified, recombinant, human thioredoxin reductase 1 protein expressed in E. coli.
Form	Liquid
Purification	Ammonium sulfate precipitation
Storage buffer	HEPES with 0.15M NaCl, 50% glycerol, 0.01% BSA
Contains	0.03% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2210232

Applications	Tested Dilution	Publications
ELISA (ELISA)	Assay dependent	-
Flow Cytometry (Flow)	1:20	-
Immunocytochemistry (ICC)	1:250	-
Immunofluorescence (IF)	1:250	-
Immunoprecipitation (IP)	1-2 µL	-
Western Blot (WB)	1:500-1:5,000	-
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

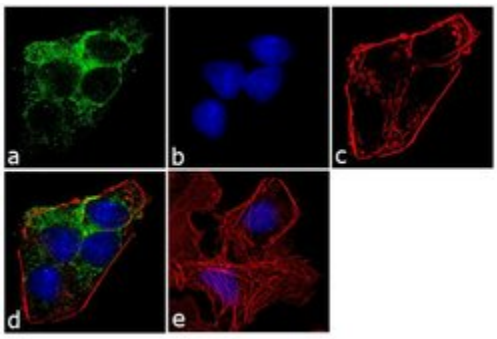
A suggested positive control for this product is HeLa cells.

Advanced Verification Data

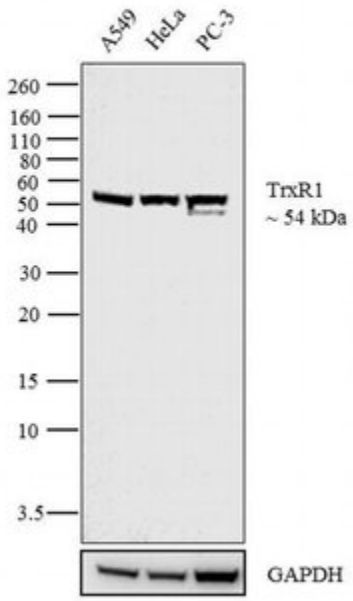


TrxR1 Antibody (LF-MA0015)
Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. A549 cells were transfected with TrxR1 siRNA and decrease in signal intensity was observed in western blot application (Fig a) using Anti- TrxR1 Mouse Monoclonal Antibody (Product # LF-MA0015). Densitometric analysis of this western blot is shown in histogram (Fig b). Knockdown validation info.

Product Images For TrxR1 Monoclonal Antibody (19A1)



TrxR1 Antibody (LF-MA0015) in IF
Immunofluorescence analysis of TrxR1 was performed using 70% confluent log phase NTERA-2 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with Thioredoxin Reductase 1 (19A1) Mouse Monoclonal Antibody (Product # LF-MA0015) at 1:250 dilution in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytosolic localization. Panel e shows the no primary antibody control. The images were captured at 60X magnification.



TrxR1 Antibody (LF-MA0015) in WB
Western blot analysis was performed on membrane enriched extracts (30 µg lysate) of A549 (Lane 1), HeLa (Lane 2) and PC-3 (Lane 3). The blot was probed with Anti-TrxR1 Mouse Monoclonal Antibody (Product # LF-MA0015, 1:1,000 dilution) and detected by chemiluminescence using Goat anti-Mouse IgG (H+L) Superclonal Secondary Antibody, HRP conjugate (Product # A28177, 0.4 µg/mL, 1:2500 dilution). A 54 kDa band corresponding to TrxR1 was observed cross the cell lines tested. Known quantity of protein samples were electrophoresed using Novex®NuPAGE®4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).

View more figures on thermofisher.com

1 Reference

Miscellaneous PubMed (1)

The Journal of biological chemistry

Selective up-regulation of human selenoproteins in response to oxidative stress.

"LF-MA0015 was used in western blot to study the effect of oxidative stress on human selenoproteins."

Authors: Touat-Hamici Z,Legrain Y,Bulteau AL,Chavatte L

Species
Human

Dilution
Not Cited

Year
2014