

ARG80944 Human Thioredoxin-1/Trx-1 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG80944-001	Antibody-coated microplate	96 well	4°C
ARG80944-002	Standard (Lyophilized)	3 X 2 ng/vial	4°C
ARG80944-003	Sample Diluent	20 ml	4°C
ARG80944-004	Biotinylated Trx1 antibody (30X)	1 vial	4°C
ARG80944-005	Antibody Diluent	16 ml	4°C
ARG80944-006	Streptavidin-HRP	1 vial	4°C
ARG80944-007	Streptavidin-HRP Diluent	16 ml	4°C
ARG80944-008	TMB Substrate	12 ml	4°C (Protect from light)
ARG80944-009	20X Wash buffer	50 ml	4°C
ARG80944-010	Plate sealer	4 strips	Room temperature
ARG80944-011	STOP solution	12 ml	4°C

Summary

Product Description	ARG80944 Human Thioredoxin-1/Trx-1 ELISA Kit is a Enzyme Immunoassay kit for the quantification of Human Thioredoxin-1/Trx-1 in Serum, Plasma and Cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	TRX1 / Thioredoxin 1
Conjugation	HRP
Sensitivity	62.5 pg/ml
Sample Type	Serum, Plasma and Cell culture supernatants
Standard Range	125 - 8000 pg/ml
Sample Volume	100 µl
Alternate Names	ATL-derived factor; TRX1; SASP; Trx; ADF; TRX; Surface-associated sulphhydryl protein; TRDX; Thioredoxin

Application Instructions

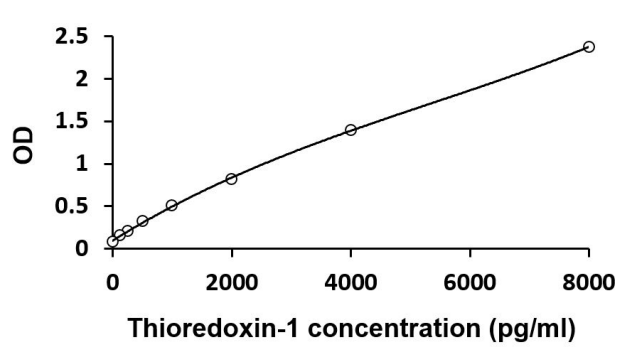
Assay Time	~200 min
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 7295 Human Swiss-port # P10599 Human
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]
Highlight	Related products: TRX1 antibodies ; TRX1 ELISA Kits ; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
Research Area	Metabolism kit; Signaling Transduction kit
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.



ARG80944 Human Thioredoxin-1/Trx-1 ELISA Kit standard curve image

ARG80944 Human Thioredoxin-1/Trx-1 ELISA Kit results of a typical standard run with optical density reading at 450 nm.