

Datasheet for ABIN5659155 **TXNRD1 ELISA Kit**



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Overview

Quantity: 96 tests

Target: TXNRD1

Reactivity: Human

Method Type: Sandwich ELISA

Detection Range: 0.156 ng/mL - 10 ng/mL

Minimum Detection Limit: 0.156 ng/mL

Application: ELISA

Product Details

Sample Type: Plasma, Serum, Tissue Homogenate

Analytical Method: Quantitative

Detection Method: Colorimetric

Specificity: This assay has high sensitivity and excellent specificity for detection of Thioredoxin Reductase 1 (TrxR1). No significant cross-reactivity or interference between Thioredoxin Reductase 1 (TrxR1) and analogues was observed.

Sensitivity: 0.057 ng/mL

Target Details

Target: TXNRD1

Alternative Name: Thioredoxin Reductase 1 ([TXNRD1 Products](#))

Target Details

Background:	Gene Name: Thioredoxin Reductase 1 Gene Aliases: TXNRD1, TR1, GRIM12, KDRF, TRXR-1, TXNR, Gene associated with retinoic and interferon-induced mortality 12 protein, KM-102-derived reductase-like factor
Pathways:	Regulation of Lipid Metabolism by PPARalpha , Regulation of Carbohydrate Metabolic Process , Cell RedoxHomeostasis

Application Details

Comment:	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5 % within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.
Assay Time:	3 h
Plate:	Pre-coated
Protocol:	The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Thioredoxin Reductase 1 (TrxR1). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Thioredoxin Reductase 1 (TrxR1). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Thioredoxin Reductase 1 (TrxR1), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of Thioredoxin Reductase 1 (TrxR1) in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Assay Precision:	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Thioredoxin Reductase 1 (TrxR1) were tested 20 times on one plate, respectively Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Thioredoxin Reductase 1 (TrxR1) were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100 Intra-Assay: CV<10% Inter-Assay: CV<12%
Restrictions:	For Research Use only

Handling

Handling Advice:	The Stop Solution is acidic. Do not allow to contact skin or eyes. Calibrators, controls and specimen samples should be assayed in duplicate. Once the procedure has been started, all steps should be completed without interruption.
Storage:	4 °C,-20 °C
Storage Comment:	-20°C. Bring all reagents to room temperature before beginning test. The kit may be stored at 4°C for immediate use within two days upon arrival. Reseal any unused strips with desiccant pack. Minimize freeze/thaw cycles.
Expiry Date:	4-8 months