Datasheet for ABIN5659376
Topoisomerase I ELISA Kit

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Overview

Quantity:	96 tests
Target:	Topoisomerase I (TOP1)
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:	Cell Lysate, Tissue Homogenate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	This assay has high sensitivity and excellent specificity for detection of Topoisomerase I (TOP1). No significant cross-reactivity or interference between Topoisomerase I (TOP1) and analogues was observed.
Sensitivity:	0.054 ng/mL

Target Details

Target:	Topoisomerase I (TOP1)
Alternative Name:	Topoisomerase I (TOP1 Products)

Target Details

Target Type:	Viral Protein
Background:	Gene Name: Topoisomerase I Gene Aliases: TOPI, DNA Topoisomerase 1
Gene ID:	7150
UniProt:	P11387
Pathways:	Caspase Cascade in Apoptosis, Stem Cell Maintenance

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 Topoisomerase I (TOP1). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Topoisomerase I (TOP1). 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 Topoisomerase I (TOP1), 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 Topoisomerase I (TOP1) 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 Topoisomerase I (TOP1) were tested 20 times on one plate, respectively Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Topoisomerase I (TOP1) were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100 Intra-Assay: CV<10%

Application Details

	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