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Datasheet for ABIN5658445

RPA1 ELISA Kit

Overview

Quantity:	96 tests
Target:	RPA1
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	0.312 ng/mL - 20 ng/mL
Minimum Detection Limit:	0.312 ng/mL
Application:	ELISA

Product Details

Sample Type:	Tissue Homogenate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	This assay has high sensitivity and excellent specificity for detection of Replication Protein A1 (RPA1). No significant cross-reactivity or interference between Replication Protein A1 (RPA1) and analogues was observed.
Sensitivity:	0.106 ng/mL

Target Details

Target:	RPA1
Alternative Name:	Replication Protein A1 (RPA1 Products)

Target Details

Background: Gene Name: Replication Protein A1
Gene Aliases: HSSB, REPA1, RF-A, RP-A, RPA70, Replication protein A 70 kDa DNA-binding subunit, Single-stranded DNA-binding protein

Pathways: [Telomere Maintenance](#), [DNA Damage Repair](#), [Mitotic G1-G1/S Phases](#), [DNA Replication](#), [Chromatin Binding](#), [Synthesis of DNA](#)

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 Replication Protein A1 (RPA1). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Replication Protein A1 (RPA1). 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 Replication Protein A1 (RPA1), 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 $450\text{nm} \pm 10\text{nm}$. The concentration of Replication Protein A1 (RPA1) 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 Replication Protein A1 (RPA1) were tested 20 times on one plate, respectively
Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Replication Protein A1 (RPA1) were tested on 3 different plates, 8 replicates in each plate.
 $CV(\%) = SD/\text{mean} \times 100$
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