Human Telomerase reverse transcriptase(TERT) ELISA kit

Product Code	CSB-EL023391HU
Abbreviation	TERT
Uniprot No.	O14746
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	12.5 ng/ml - 800 ng/ml
Sensitivity	3.125 ng/ml
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Cancer
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm. An incubator can provide stable incubation conditions up to 37°C±5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Gene Names	TERT
Tag Info	quantitative
Protein Description	Sandwich
Component	A micro ELISA plate --- The 96-well plate has been pre-coated with an anti-human TERT antibody. This dismountable microplate can be divided into 12 x 8 strip plates. Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve.

One vial Biotin-labeled TERT antibody (100 x concentrate) (120 µl/bottle) ---Act as the detection antibody.
One vial HRP-avidin (100 x concentrate) (120 µl/bottle) ---Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic.
One vial Biotin-antibody Diluent (15 ml/bottle) ---Dilute the Biotin-antibody.
One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution.
One vial Sample Diluent (50 ml/bottle)---Dilute the sample to an appropriate concentration.
One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances.
One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.
One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow.
Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation.
An instruction manual

Description

The Human Telomerase reverse transcriptase (TERT) ELISA kit allows for the in vitro quantitative determination of TERT concentrations in serum, plasma, or cell culture supernates. It is not intended for diagnostic use. This assay kit was designed and optimized for cancer research use in humans. The kit has undergone rigorous quality control in multiple parameters, including sensitivity, specificity, precision, linearity, recovery, and inter-batch difference. Refer to the product instructions for more details.

This assay employs the quantitative sandwich enzyme immunoassay technique, in which TERT in the samples or standards are sandwiched between pre-coated TERT antibody and Biotin-conjugated TERT antibody. HRP-avidin is then added to the wells. Following a wash to remove any unbound reagent, the TMB substrate solution is added to the wells and color develops in proportion to the amount of TERT bound in the initial step. The color development is stopped upon adding the stop solution, and the intensity of the color is measured at 450 nm via a microplate reader. The levels of TERT in the samples can be determined by referring to the O.D. (optical density) of the samples to the standard curve.

TERT is a catalytic subunit of the telomerase. It is involved in a wide range of functions, including the modulation of signal transduction and gene expression, and protection against oxidative damage independent of its telomere elongation activity. TERT also mediates stem cell function, tissue homeostasis, aging, and carcinogenesis.

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