Datasheet for ABIN1112592

EGF ELISA Kit

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Overview

Quantity:	96 tests
Target:	EGF
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	4.7-300 pg/mL
Minimum Detection Limit:	4.7 pg/mL
Application:	ELISA

Product Details

Purpose:	For quantitative detection of EGF in Human serum, body fluids, tissue lysates or cell culture supernates.
Sample Type:	Cell Culture Supernatant, Serum, Tissue Lysate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	< 1 pg/mL
Components:	1. One 96-well plate pre-coated with anti-Human EGF antibody 2. Lyophilized Human EGF standards: 2 tubes (1ng / tube) 3. Sample / Standard diluent buffer: 30ml 4. Biotin conjugated anti-Human EGF antibody (Concentrated): 130 µl.
Material not included:	1. 37 °C incubator 2. Microplate reader (wavelength: 450nm) 3. Precise pipette and disposable pipette tips 4. Automated plate washer 5. ELISA shaker 6. 1.5ml of Eppendorf tubes 7. Plate cover 8. Absorbent filter papers 9. Plastic or glass container with volume of above 1L

Target Details

Target:	EGF
Alternative Name:	EGF (EGF Products)
Background:	Epidermal growth factor (EGF) is a growth factor that stimulates cell growth, proliferation, and differentiation by binding to its receptor EGFR. It has a profound effect on the differentiation of specific cells in vivo and is a potent mitogenic factor for a variety of cultured cells of both ectodermal and mesodermal origin. EGF is produced in abundance by the mouse submandibular gland, and it can be found in human platelets, macrophages, urine, saliva, milk, and plasma. It is a magnesiotropic hormone crucial for total body Mg(2+) balance. Futamura et al. (2002) found that chronic treatment of rats with haloperidol had no influence on EGF levels in the brain or serum.
Pathways:	NF-kappaB Signaling, RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Regulation of Carbohydrate Metabolic Process, Hepatitis C, Protein targeting to Nucleus, Interaction of EGFR with phospholipase C-gamma, Thromboxane A2 Receptor Signaling, EGFR Downregulation

Application Details

Comment:	This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-EGF polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-EGF polyclonal antibody was used as detection antibodies. The standards test samples and biotin conjugated detection antibody were added - the wells subsequently and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were used - visualize HRP enzymatic reaction. TMB was catalyzed by HRP - produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional - the EGF amount of sample captured in plate. Read the O.D. absorbance at 450 nm in a microplate reader and then the concentration of EGF can be calculated.
Plate:	Pre-coated
Reagent Preparation:	1. Before the experiment, centrifuge each kit component for several minutes to bring down all reagents to the bottom of tubes. 2. It is recommend to measure each standard and sample in duplicate. 3. Do NOT let the plate completely dry at any time! Since the dry condition can inactivate the biological material on the plate. 4. Do not reuse pipette tips and tubes to avoid cross contamination. 5. Do not use the expired components and the components from different batches. 6. To avoid the marginal effect of plate incubation for temperature differences (the

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	marginal wells always get stronger reaction), it is recommend to equilibrate the ABC working solution and TMB substrate for at least 30 min at room temperature (37°C) before adding to wells.The TMB substrate (Kit Component 8) is colorless and transparent before use, if not, please contact us for replacement.
Sample Preparation:	Preparation of sample and reagents 1. Sample Isolate the test samples soon after collecting, then, analyze immediately (within 2 hours). Or aliquot and store at -20 °C for long term. Avoid multiple freeze-thaw cycles. Body fluids, tissue lysate and cell culture supernate: Centrifuge to remove precipitate, analyze immediately or aliquot and store at -20 °C° C. Serum: Coagulate the serum at room temperature (about 4 hours). Centrifuge at approximately 1000 × g for 15 min. Analyze the serum immediately or aliquot and store at -20 °C . Note: 1. Coagulate blood samples completely, then, centrifuge, and avoid hemolysis and particle. 2. NaN3 can not be used as test sample preservative, since it is the inhibitor for HRP.
Restrictions:	For Research Use only

Handling

Preservative:	Sodium azide, Thimerosal (Merthiolate)