Datasheet for ABIN1112598

ErbB2/Her2 ELISA Kit

Go to Product page

Overview

Quantity:	96 tests
Target:	ErbB2/Her2
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	For quantitative detection of ErbB-2 in human serum, plasma, body fluids tissue lysates or cell culture supernates..
Sample Type:	Cell Culture Supernatant, Plasma, Serum, Tissue Lysate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	< 10 pg/mL
Components:	1. One 96-well plate pre-coated with anti-Human ErbB-2 antibody 2. Lyophilized Human ErbB-2 standards: 2 tubes (10ng / tube) 3. Sample / Standard diluent buffer: 30ml 4. Biotin conjugated anti-Human ErbB-2 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:	ErbB2/Her2
Alternative Name:	ErbB2 (ErbB2/Her2 Products)
Background:	ErbB-2 also known as HER2 (Human Epidermal Growth Factor Receptor 2), Neu, CD340 or p185, is a 185-kD glycoprotein with tyrosine kinase activity, and it is a member of the epidermal growth factor receptor (EGFR/ErbB) family. ErbB-2 is encoded by ERBB2, a known proto-oncogene located at the long arm of human chromosome 17(17q21-q22). ErbB-2 was named for its similarity to ERBB (avian erythroblastosis oncogene B). The ErbB family is composed of four plasma membrane-bound receptor tyrosine kinases. Unlike the other family members, ErbB-2 is considered to be an orphan receptor as it has no known ligand. Overexpression of ERBB2 and ERBB3 has been implicated in the neoplastic transformation of prostate cancer.
Pathways:	RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Skeletal Muscle Fiber Development

Application Details

Comment:	This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-ErbB-2 polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-ErbB-2 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 ErbB-2 amount of sample captured in plate. Read the O.D. absorbance at 450 nm in a microplate reader and then the concentration of ErbB-2 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 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

Application Details

	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 lysates and cell culture supernatants: Centrifuge to remove precipitate, analyze immediately or aliquot and store at -20 °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 . Plasma: Collect plasma with heparin, EDTA as the anticoagulant. Centrifuge for 15 min at 1000 x g within 30 min of collection. For eliminating the platelet effect, suggesting that further centrifugation for 10 min at 2-8°C at 10000 x g. Analyze immediately or aliquot and store frozen at -20 °C. citrate can not be used as anticoagulant here. 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)