

Datasheet for ABIN2859248
Epiregulin ELISA Kit



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1 Image

Overview

Quantity:	96 tests
Target:	Epiregulin (EREG)
Binding Specificity:	AA 60-108
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10.000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Epiregulin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: V60-L108
Specificity:	E.coli, V60-L108
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<10pg/mL

Product Details

Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl
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Target Details

Target:	Epiregulin (EREG)
Alternative Name:	EREG (EREG Products)
Background:	<p>Protein Function: Ligand of the EGF receptor/EGFR and ERBB4. Stimulates EGFR and ERBB4 tyrosine phosphorylation (PubMed:9419975). Contributes to inflammation, wound healing, tissue repair, and oocyte maturation by regulating angiogenesis and vascular remodeling and by stimulating cell proliferation (PubMed:24631357). .</p> <p>Background: Epiregulin (EPR) is a protein that in humans is encoded by the EREG gene. It is a member of the epidermal growth factor family. Epiregulin can function as a ligand of epidermal growth factor receptor (EGFR), as well as a ligand of most members of the ERBB (v-erb-b2 oncogene homolog) family of tyrosine-kinase receptors. The secondary structure at the C-terminus epiregulin is different from other epidermal growth factor family ligands because of the lack of hydrogen bonds. The structural difference at the C-terminus may provide an explanation for the reduced binding affinity of epiregulin to the ERBB receptors.</p> <p>Synonyms: Proepiregulin,Epiregulin,EPR,EREG,</p> <p>Full Gene Name: Proepiregulin</p> <p>Cellular Localisation: Epiregulin: Secreted, extracellular space.</p>
Gene ID:	2069
UniProt:	O14944
Pathways:	RTK Signaling , Fc-epsilon Receptor Signaling Pathway , EGFR Signaling Pathway , Neurotrophin Signaling Pathway , Regulation of Muscle Cell Differentiation

Application Details

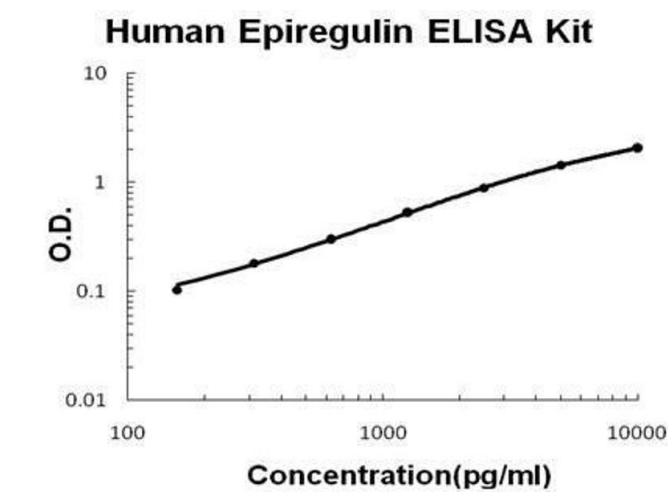
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: In normal adults, expressed predominantly in the placenta and peripheral blood leukocytes. High levels were detected in carcinomas of the bladder, lung, kidney and colon. .

Application Details

Plate:	Pre-coated
Protocol:	human Epiregulin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Epiregulin has been precoated onto 96-well plates. Standards (E.coli,V60-L108) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Epiregulin is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Epiregulin amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human Epiregulin standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin , EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human Epiregulin standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 1.15, Standard deviation: 0.059, CV(%): 5.2• Sample 2: n=16, Mean(ng/ml): 2.52, Standard deviation: 0.113, CV(%): 4.5• Sample 3: n=16, Mean(ng/ml): 5.81, Standard deviation: 0.273, CV(%): 4.7,• Sample 1: n=24, Mean(ng/ml): 1.63, Standard deviation: 0.096, CV(%): 5.9• Sample 2: n=24, Mean(ng/ml): 2.87, Standard deviation: 0.146, CV(%): 5.1• Sample 3: n=24, Mean(ng/ml): 5.66, Standard deviation: 0.350, CV(%): 6.2
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months



ELISA

Image 1. Human Epiregulin PicoKine ELISA Kit standard curve