

Datasheet for ABIN921121

CEACAM5 ELISA Kit



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Overview

Quantity:	96 tests
Target:	CEACAM5
Binding Specificity:	AA 35-685
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	312-20000 pg/mL
Minimum Detection Limit:	312 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human CEA
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: K35-A685
Specificity:	Expression system for standard: NSO Immunogen sequence: K35-A685
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
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

Target Details

Target:	CEACAM5
Alternative Name:	CEACAM5 (CEACAM5 Products)
Background:	<p>Protein Function: Cell surface glycoprotein that plays a role in cell adhesion and in intracellular signaling. Receptor for E.coli Dr adhesins. .</p> <p>Background: Carcinoembryonic antigen(CEA) is a complex immunoreactive glycoprotein with a molecular weight of 180,000 comprising 60 % carbohydrate. It is found in adenocarcinomas of endodermally derived digestive system epithelia and in fetal colon.Carcinoembryonic antigen is one of the most widely used tumor markers in serum immunoassay determinations of carcinoma.</p> <p>Synonyms: Carcinoembryonic antigen-related cell adhesion molecule 5,Carcinoembryonic antigen,CEA,Meconium antigen 100,CD66e,CEACAM5,CEA,</p> <p>Full Gene Name: Carcinoembryonic antigen-related cell adhesion molecule 5</p> <p>Cellular Localisation: Cell membrane, Lipid-anchor, GPI-anchor.</p>
Gene ID:	111518
UniProt:	P06731

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:	<p>Sequence similarities: Belongs to the immunoglobulin superfamily. CEA family.</p> <p>Tissue Specificity: Found in adenocarcinomas of endodermally derived digestive system epithelium and fetal colon.</p>
Plate:	Pre-coated
Protocol:	human CEA ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CEA has been precoated onto 96-

Application Details

well plates. Standards(NSO, K35-A685) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CEA 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 CEA amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 20000pg/mL, 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL human CEA 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 CEA standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(ng/ml): 2.36, Standard deviation: 0.113, CV(%): 4.8
- Sample 2: n=16, Mean(ng/ml): 5.59, Standard deviation: 0.235, CV(%): 4.2
- Sample 3: n=16, Mean(ng/ml): 10.4, Standard deviation: 0.53, CV(%): 5.1,
- Sample 1: n=24, Mean(ng/ml): 2.48, Standard deviation: 0.171, CV(%): 6.9
- Sample 2: n=24, Mean(ng/ml): 5.56, Standard deviation: 0.395, CV(%): 7.1
- Sample 3: n=24, Mean(ng/ml): 10.7, Standard deviation: 0.556, CV(%): 5.2

Restrictions: For Research Use only

Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

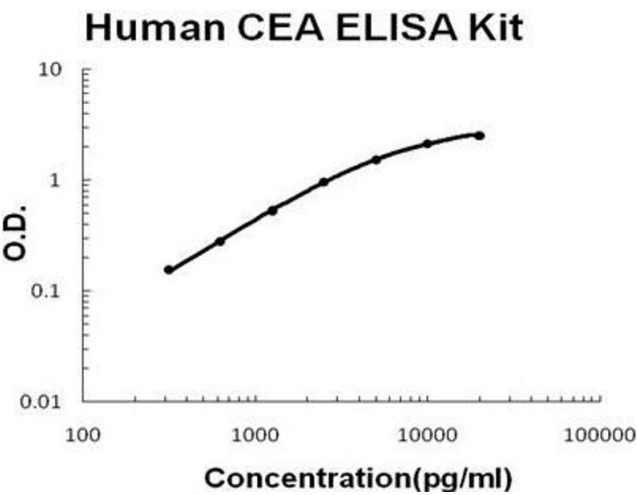
Storage: -20 °C, 4 °C

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

Expiry Date: 12 months

Publications

Product cited in: Romano, Chiaro, Lucarelli, Santarelli, Cucchiara, Guadagnini, Miele, Di Nardo: "Mucosal cytokine profiles in paediatric eosinophilic oesophagitis: A case-control study." in: **Digestive and liver disease : official journal of the Italian Society of Gastroenterology and the Italian Association for the Study of the Liver**, (2014) ([PubMed](#)).



ELISA

Image 1. Human CEA PicoKine ELISA Kit standard curve