

Human Carcinoembryonic antigen / CEA ELISA Kit

SKU: HUF100080

Datasheet:

Key features and Sample Types

Aliases:

CEA/Carcinoembryonic antigen/CD66E/CD66/CEACAM5/Carcinoembryonic Antigen-related Cell Adhesion Molecule 5/Meconium antigen 100

Uniprot:

P06731

Detection method:

Sandwich

Sample Type:

Serum, Plasma and other biological fluids

Range:

0.312-20ng/ml

Sensitivity:

0.188 ng/ml

Storage & Expiry

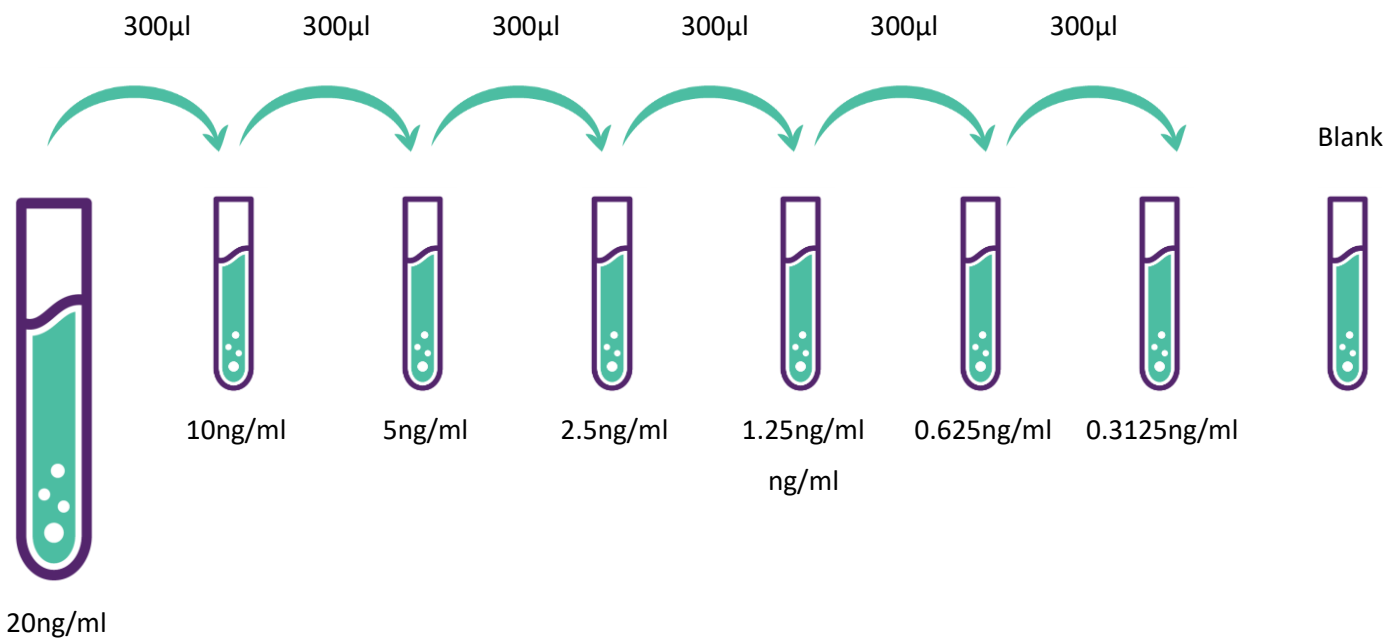
ELISA Genie ELISA Kits are shipped on ice packs. Please store this ELISA Kit at 4°C. Date of expiration will be on the ELISA Box label.

Standard dilution

1). 20ng/ml of standard solution: Add 1 ml of Sample / Standard dilution buffer into one Standard tube, keep the tube at room temperature for 10 min and mix thoroughly.

2). 20ng/ml --> 0.3125ng/ml of standard solutions: Label 6 Eppendorf tubes with 10ng/ml, 5ng/ml, 2.5ng/ml, 1.25ng/ml, 0.625ng/ml, 0.3125ng/ml, respectively. Aliquot 300µl of the Sample / Standard dilution buffer into each tube. Add 300µl of the above 20ng/ml standard solution into 1st tube and mix thoroughly. Transfer 300µl from 1st tube to 2nd tube and mix thoroughly. Transfer 300µl from 2nd tube to 3rd tube and mix thoroughly, and so on.

DILUTION SERIES



Note: The standard solutions are best used within 2 hours. The standard solution series should be kept at 4°C for up to 12 hours. Or store at -20 °C for up to 48 hours. Avoid repeated freeze-thaw cycles.

Typical Data & Standard Curve

Results of a typical standard run of Human Carcinoembryonic antigen / CEA ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment.

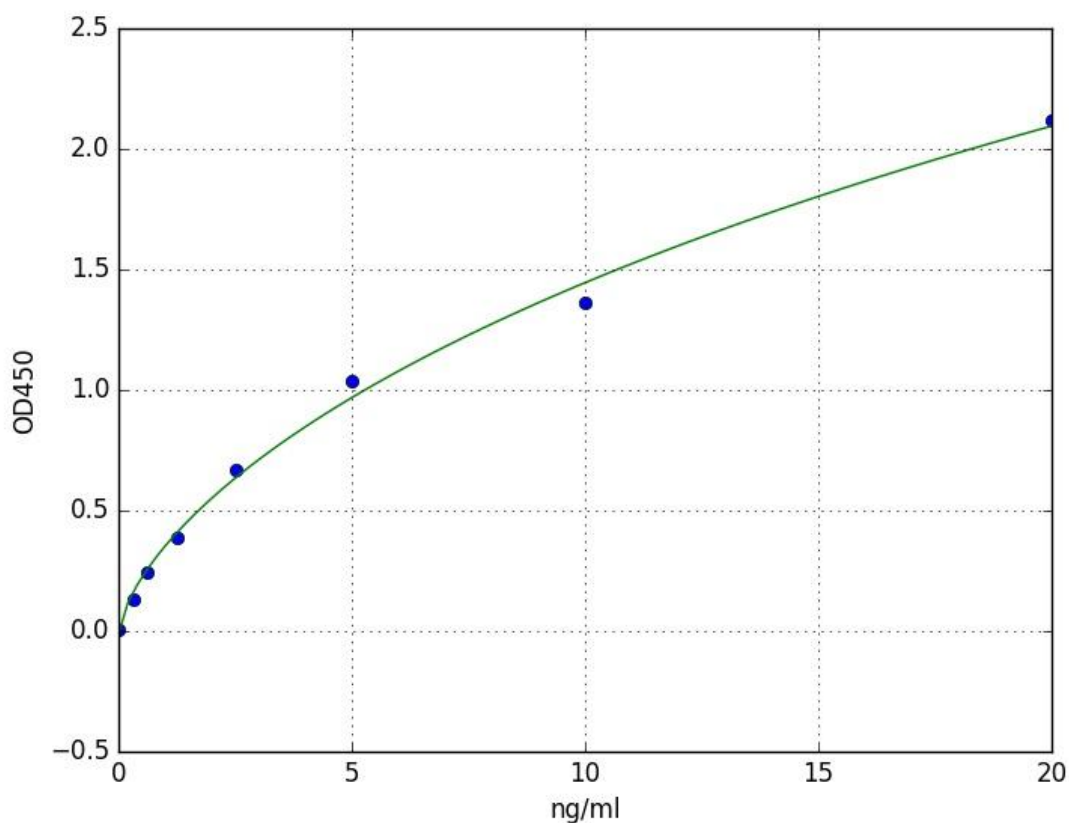
Specificity

This assay has high sensitivity and excellent specificity for detection of Human Carcinoembryonic antigen / CEA. No significant cross-reactivity or interference between Human Carcinoembryonic antigen / CEA and analogues was observed.

Recovery

Matrices listed below were spiked with Human Carcinoembryonic antigen / CEA and the recovery rates were calculated by comparing the measured value to the expected amount of Human Carcinoembryonic antigen / CEA in samples.

Matrix	Recovery range (%)	Average (%)
Serum (n=5)	85-98	90
EDTA plasma (n=5)	86-100	93
UFH plasma (n=5)	85-101	93



Linearity

The linearity of the kit was assayed by testing samples spiked with appropriate concentration of Human Carcinoembryonic antigen / CEA and their serial dilutions.

Sample	1:2	1:4	1:8	1:16
Serum (n=5)	89-104%	93-102%	91-102%	88-100%
EDTA plasma (n=5)	85-100%	83-97%	84-101%	84-101%
UFH plasma (n=5)	82-98%	82-91%	81-100%	80-86%

Precision

- **Intra-assay Precision (Precision within an assay):** 3 samples with low, middle and high level Human Carcinoembryonic antigen / CEA were tested 20 times on one plate, respectively.
- **Inter-assay Precision (Precision between assays):** 3 samples with low, middle and high level Human Carcinoembryonic antigen / CEA were tested on 3 different plates, 8 replicates in each plate.
- **CV (%):** SD/mean X 100
- **Intra-Assay:** CV<8%
- **Inter-Assay:** CV<10%

Stability

The stability of the Human Carcinoembryonic antigen / CEA ELISA Kit is determined by the loss rate of activity. The loss rate of this kit is less than 10% within the expiration date under appropriate storage conditions.

Standard (n=5)	37°C for 1 month	4°C for 6 months
Average (%)	80	95-100

To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

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