**Product name**
- Human Carcino Embryonic Antigen ELISA Kit (CEA)

**Detection method**
- Colorimetric

**Sample type**
- Cell culture supernatant, Serum, Plasma

**Assay type**
- Sandwich (quantitative)

**Sensitivity**
- < 0.2 ng/ml

**Range**
- 0.343 ng/ml - 250 ng/ml

**Recovery**
- > 100%

<table>
<thead>
<tr>
<th>Sample type</th>
<th>Average %</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell culture supernatant</td>
<td>116.7</td>
<td>93% - 136%</td>
</tr>
<tr>
<td>Serum</td>
<td>145.6</td>
<td>135% - 156%</td>
</tr>
<tr>
<td>Plasma</td>
<td>103.8</td>
<td>82% - 124%</td>
</tr>
</tbody>
</table>

**Assay duration**
- Multiple steps standard assay

**Species reactivity**
- Reacts with: Human

**Product overview**
Abcam’s Carcinoembryonic Antigen (CEA) Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of Human CEA in serum, plasma, and cell culture supernatants.

This assay employs an antibody specific for Human CEA coated on a 96-well plate. Standards and samples are pipetted into the wells and CEA present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human CEA antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of CEA bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Get results in 90 minutes with Human Carcinoembryonic Antigen ELISA Kit (CD66e) (ab183365)
from our SimpleStep ELISA® range.

**Notes**
Optimization may be required with urine samples.

**Platform**
Microplate

### Properties

**Storage instructions**
Store at -20°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>1 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000X HRP-Streptavidin Concentrate</td>
<td>1 x 200µl</td>
</tr>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>1 x 25ml</td>
</tr>
<tr>
<td>5X Assay Diluent B</td>
<td>1 x 15ml</td>
</tr>
<tr>
<td>Assay Diluent A</td>
<td>1 x 30ml</td>
</tr>
<tr>
<td>Biotinylated anti-Human CEA (lyophilized)</td>
<td>2 vials</td>
</tr>
<tr>
<td>CEA Microplate (12 x 8 well strips)</td>
<td>1 unit</td>
</tr>
<tr>
<td>Recombinant Human CEA Standard (lyophilized)</td>
<td>2 vials</td>
</tr>
<tr>
<td>Stop Solution</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>TMB One-Step Substrate Reagent</td>
<td>1 x 12ml</td>
</tr>
</tbody>
</table>

**Relevance**
Carcino Embryonic Antigen (CEA) is synthesised during development in the fetal gut, and is re-expressed in increased amounts in intestinal carcinomas and several other tumors. Antibodies to CEA are useful in identifying the origin of various metastatic adenocarcinomas and in distinguishing pulmonary adenocarcinomas (60 to 70% are CEA+) from pleural mesotheliomas (rarely or weakly CEA+).

**Cellular localization**
Cell Membrane

**Images**
CEA measured in biological fluids showing quantity (ng) per mL of tested sample

Sandwich ELISA - Human CEA (ab99992)

Representative Standard Curve using ab99992.

Typical Standard Curve

Representative Standard Curve using ab99992.

Typical Standard Curve

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