

Product datasheet

Anti-Carcino Embryonic Antigen CEA antibody ab131070

[4 References](#) [2 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-Carcino Embryonic Antigen CEA antibody |
| Description | Rabbit polyclonal to CEACAM5 |
| Host species | Rabbit |
| Tested applications | Suitable for: WB |
| Species reactivity | Reacts with: Human |
| Immunogen | Insect cells-derived recombinant full length Human CEACAM5. |
| Positive control | WB: A549, MCF7, SW620 and Caco-2 cell lysates. |
| General notes | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p> |

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. |
| Storage buffer | Preservative: 0.025% Sodium azide Constituents: 0.45% Sodium chloride, 0.1% Dibasic monohydrogen sodium phosphate |
| Purity | Immunogen affinity purified |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab131070 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|---|
| WB | | Use a concentration of 0.1 - 0.5 µg/ml. Detects a band of approximately 120-200 kDa (predicted molecular weight: 76 kDa). |

Target

Function

Cell surface glycoprotein that plays a role in cell adhesion and in intracellular signaling. Receptor for E.coli Dr adhesins.

Tissue specificity

Found in adenocarcinomas of endodermally derived digestive system epithelium and fetal colon.

Sequence similarities

Belongs to the immunoglobulin superfamily. CEA family.
Contains 7 Ig-like (immunoglobulin-like) domains.

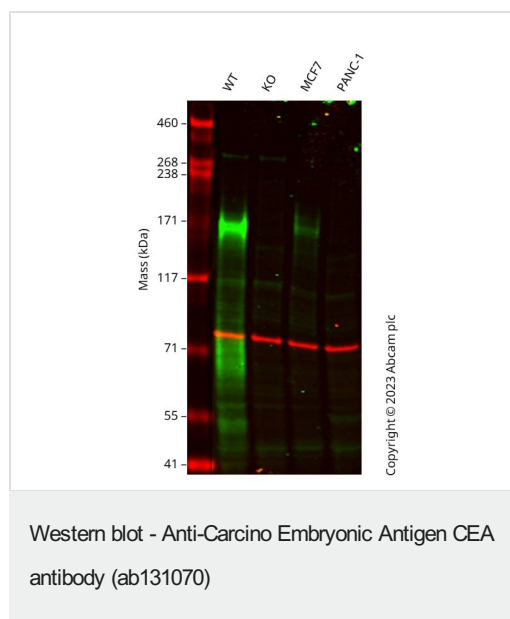
Post-translational modifications

Complex immunoreactive glycoprotein with a MW of 180 kDa comprising 60% carbohydrate.

Cellular localization

Cell membrane.

Images



All lanes : Anti-Carcino Embryonic Antigen CEA antibody (ab131070) at 0.1 µg/ml

Lane 1 : Wild-type A549 cell lysate

Lane 2 : CEACAM5 knockout A549 cell lysate

Lane 3 : MCF7 cell lysate

Lane 4 : PANC-1 cell lysate

Lysates/proteins at 20 µg per lane.

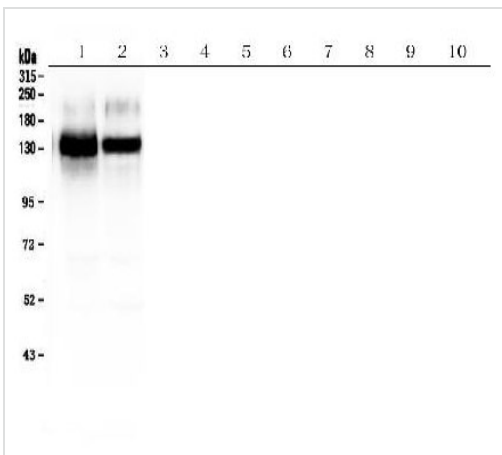
Performed under reducing conditions.

Predicted band size: 76 kDa

Observed band size: 170 kDa

Western blot: Anti-CEACAM5 antibody (ab131070) staining at 0.1 µg/ml, shown in green; Mouse anti-CANX [CANX/1543] (**ab238078**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab131070 was shown to bind specifically to CEACAM5. A band was observed at 170 kDa in wild-type A549

cell lysates with no signal observed at this size in CEACAM5 knockout cell line. To generate this image, wild-type and CEACAM5 knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-Carcino Embryonic Antigen CEA antibody (ab131070)

All lanes : Anti-Carcino Embryonic Antigen CEA antibody (ab131070) at 0.5 µg/ml

Lane 1 : SW620 (human colorectal adenocarcinoma cell line) whole cell lysate

Lane 2 : Caco-2 (human colorectal adenocarcinoma cell line) whole cell lysate

Lane 3 : Mouse small intestine tissue lysate

Lane 4 : Mouse stomach tissue lysate

Lane 5 : Mouse lung tissue lysate

Lane 6 : Mouse liver tissue lysate

Lane 7 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

Lane 8 : HEPA 1-6 (mouse epithelial hepatoma cell line) whole cell lysate

Lane 9 : Sp2/0 (mouse B lymphocyte hybridoma cell line) whole cell lysate

Lane 10 : RH-35 (rat hepatoma cell line) whole cell lysate

Lysates/proteins at 50 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (HRP) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 76 kDa

Observed band size: 120-200 kDa

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at room temperature. The membrane was incubated with primary antibody overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with secondary antibody for 1.5 hour at room temperature.

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