

Anti-Carcino Embryonic Antigen CEA Antibody [JM93-28] - BSA and Azide free

**HA750434**



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	WB, IF-Cell, IF-Tissue, IHC-P
<b>Molecular Wt:</b>	Predicted band size: 77 kDa
<b>Clone number:</b>	JM93-28

**Description:** Carcinoembryonic antigen-related cell adhesion molecule 5 (CEACAM5) also known as CD66e (Cluster of Differentiation 66e), is a member of the carcinoembryonic antigen (CEA) gene family. In the literature, CEACAM5 is often used as a synonym for cancer embryonic antigen (CEA), a well-known biomarker of many types of malignancies, colorectal cancer in the first place. Its primary function in the embryonic intestine and colon tumors is adhesion between epithelial cells. Also, it plays a significant role in the inhibition of differentiation and apoptosis in colon cells. There are evidences that high CEACAM5 expression is firmly associated with the CD133-positive colorectal cancer stem cells.

**Immunogen:** Human Carcinoembryonic Antigen (CEA) purified from human liver.

**Positive control:** A549 cell lysate, MCF7 cell lysate, BxPC-3 cell lysate, HUVEC, MCF-7, human lung cancer tissue, human colon carcinoma tissue.

**Subcellular location:** Cell membrane, Apical cell membrane, Cell surface.

**Database links:** SwissProt: P06731 Human

**Recommended Dilutions:**

<b>WB</b>	1:1,000
<b>IF-Cell</b>	1:50-1:200
<b>IF-Tissue</b>	1:50-1:200
<b>IHC-P</b>	1:2,000

**Storage Buffer:** 1\*PBS (pH7.4).

**Storage Instruction:** Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

**Hangzhou Huaan Biotechnology Co., Ltd.**

Orders:0086-571-88062880

Technical:0086-571-89986345

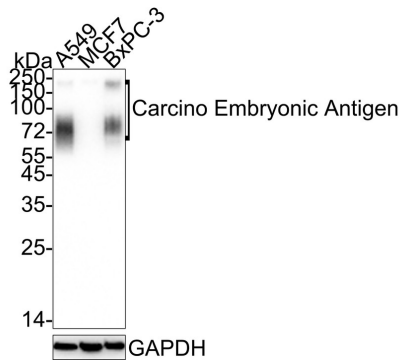
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## Images

**Fig1:** Western blot analysis of Carcino Embryonic Antigen CEA on different lysates with Rabbit anti-Carcino Embryonic Antigen CEA antibody (HA750434) at 1/1,000 dilution.

Lane 1: A549 cell lysate  
Lane 2: MCF7 cell lysate  
Lane 3: BxPC-3 cell lysate



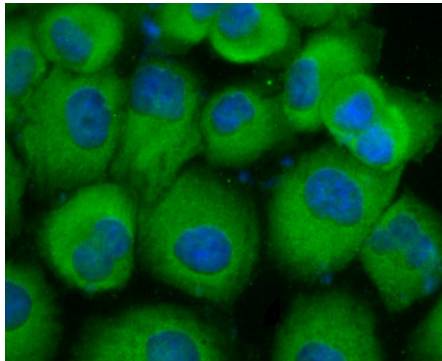
Lysates/proteins at 20 µg/Lane.

Predicted band size: 77 kDa  
Observed band size: 70-200 kDa

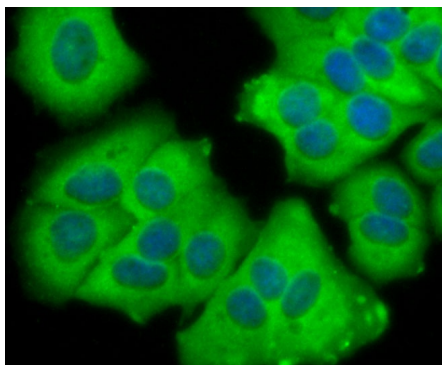
Exposure time: 6 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750434) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.



**Fig2:** ICC staining of Carcino Embryonic Antigen CEA in HUVEC cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (HA750434, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



**Fig3:** ICC staining of Carcino Embryonic Antigen CEA in MCF-7 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (HA750434, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

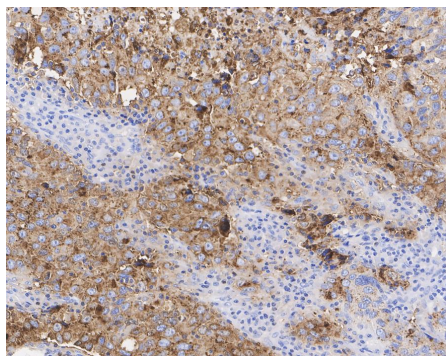
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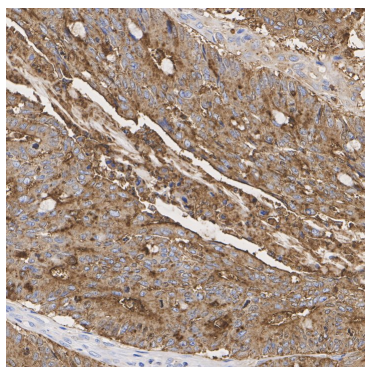
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**Fig4:** Immunohistochemical analysis of paraffin-embedded human lung cancer tissue with Rabbit anti-Carcino Embryonic Antigen CEA antibody (HA750434) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA750434) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig5:** Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue with Rabbit anti-Carcino Embryonic Antigen CEA antibody (HA750434) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA750434) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

### Background References

1. Xin H et al. Establishment and characterization of 7 novel hepatocellular carcinoma cell lines from patient-derived tumor xenografts. PLoS One 9:e85308 (2014).
2. Stern LA et al. Geometry and expression enhance enrichment of functional yeast-displayed ligands via cell panning. Biotechnol Bioeng 113:2328-41 (2016).

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