

# Carcinoembryonic Antigen (CEA) / CD66 Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM506 ] Catalog # AH11045

# **Product Information**

Application	IHC, IF, FC
Primary Accession	<u>P06731</u>
Other Accession	<u>1048, 634, 709196</u>
Reactivity	Human, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	SPM506
Calculated MW	76796

### **Additional Information**

Gene ID	1048
Other Names	Carcinoembryonic antigen-related cell adhesion molecule 5, Carcinoembryonic antigen, CEA, Meconium antigen 100, CD66e, CEACAM5, CEA
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Carcinoembryonic Antigen (CEA) / CD66 Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	CEACAM5 ( <u>HGNC:1817</u> )
Function	Cell surface glycoprotein that plays a role in cell adhesion, intracellular signaling and tumor progression (PubMed: <u>10864933</u> , PubMed: <u>10910050</u> , PubMed: <u>2803308</u> ). Mediates homophilic and heterophilic cell adhesion with other carcinoembryonic antigen-related cell adhesion molecules, such as CEACAM6 (PubMed: <u>2803308</u> ). Plays a role as an oncogene by promoting tumor progression; induces resistance to anoikis of colorectal carcinoma cells (PubMed: <u>10910050</u> ).
Cellular Location	Cell membrane; Lipid-anchor, GPI-anchor. Apical cell membrane. Cell surface Note=Localized to the apical glycocalyx surface

Expressed in columnar epithelial and goblet cells of the colon (at protein level) (PubMed:10436421). Found in adenocarcinomas of endodermally derived digestive system epithelium and fetal colon.

# Background

This antibody recognizes proteins of 80-200kDa, identified as different members of CEA family. CEA is synthesized during development in the fetal gut and is re-expressed in increased amounts in intestinal carcinomas and several other tumors. This MAb does not react with nonspecific cross-reacting antigen (NCA) and with human polymorphonuclear leucocytes. It shows no reaction with a variety of normal tissues and is suitable for staining of formalin/paraffin tissues. CEA is not found in benign glands, stroma, or malignant prostatic cells. Antibody to CEA is useful in detecting early foci of gastric carcinoma and in distinguishing pulmonary adenocarcinomas (60-70% are CEA+) from pleural mesotheliomas (rarely or weakly CEA+). Anti-CEA positivity is seen in adenocarcinomas from the lung, colon, stomach, esophagus, pancreas, gallbadder, urachus, salivary gland, ovary, and endocervix.

### References

Muraro R, et. al. Cancer Research, 1985, 45:5769-80. | Siler K, et. al. Biotechnology Therapeutics, 1993, 4(3-4):163-81. | Robbins PF, et. al. International Journal of Cancer, 1993, 53(6):892-7

#### Images



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with CEA Monoclonal Antibody (SPM506)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.