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CEA Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1508a

Product Information

Application	WB, ICC, E
Primary Accession	P06731
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3G12
Isotype	IgG1
Calculated MW	76796
Description	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+). The carcinoembryonic antigen (CEA) is a member of a large family of glycoproteins and a useful tumor marker for adenocarcinoma. Tissue specificity: Found in adenocarcinomas of endodermally derived digestive system epithelium and fetal colon.
Immunogen	Purified recombinant fragment of human CEA expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	1048
Other Names	Carcinoembryonic antigen-related cell adhesion molecule 5, Carcinoembryonic antigen, CEA, Meconium antigen 100, CD66e, CEACAM5, CEA
Dilution	WB~~1/500 - 1/2000 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CEA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

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

References

1. Scand J Clin Lab Invest. 2008;68(8):703-13. 2. Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi. 2008 Apr;24(4):370-2. Chinese.

Images

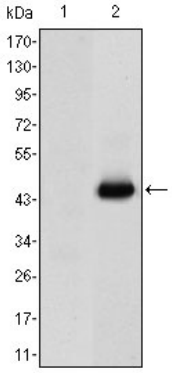

Figure 1: Western blot analysis using CEA mAb against HEK293 (1) and CEA(AA: 460-600)-hIgGFc transfected HEK293 (2) cell lysate.

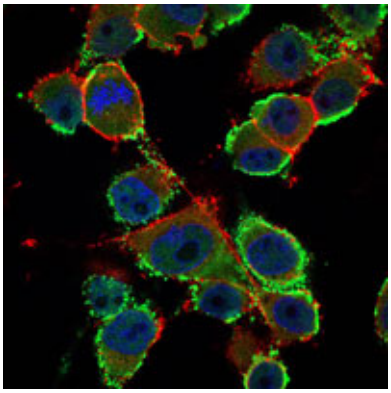

Figure 2: Immunofluorescence analysis of PANC-1 cells using CEA mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.