10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CEACAM5 Antibody

Catalog # ASC11690

Product Information

Application	WB, E
Primary Accession	P06731
Other Accession	NP_004354, 98986445
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	76796
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CEACAM5 antibody can be used for detection of CEACAM5 by Western blot at 1 - 2 □g/ml.

Additional Information

Gene ID	1048
Other Names	Carcinoembryonic antigen-related cell adhesion molecule 5, Carcinoembryonic antigen, CEA, Meconium antigen 100, CD66e, CEACAM5, CEA
Target/Specificity	CEACAM5; CEACAM5 antibody is human, mouse and rat reactive. CEACAM5 antibody is predicted to not cross-react with other CEACAM protein family members.
Reconstitution & Storage	CEACAM5 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	CEACAM5 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. 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.

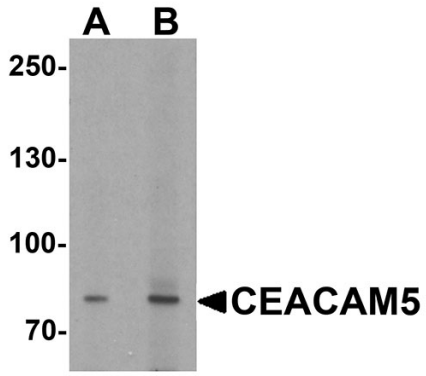
Background

CEACAM5 is a member of the carcinoembryonic antigen (CEA) family, which belongs to the immunoglobulin superfamily (1,2). CEACAM proteins are involved in cell-cell recognition and modulate cellular processes that range from the shaping of tissue architecture and neovascularization to the regulation of insulin homeostasis and T-cell proliferation (2). CEACAM5 has been shown to be overexpressed in a majority of carcinomas and has been suggested to be a intercellular adhesion molecule involved in cancer invasion and metastasis (3).

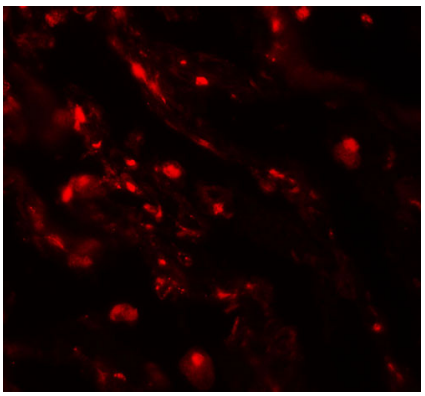
References

Gold P and Freedman SO. Specific carinoembryonic antigens of the human digestive system. J. Exp. Med. 1965; 122:467-81.
Kuespert K, Pils S, and Hauck CR. CEACAMs: their role in physiology and pathophysiology. Curr. Opin. Cell Biol. 2006; 565-71.
Yoshioka T, Masuko T, Kotanagi H, et al. Homotypic adhesion though carcinoembryonic antigen plays a role in hepatic metastasis development. Jpn. J. Cancer Res. 1998; 89:177-85.

Images



Western blot analysis of CEACAM5 in rat lung tissue lysate with CEACAM5 antibody at (A) 1 and (B) 2 µg/ml.



Immunofluorescence of CEACAM5 in human lung tissue with CEACAM5 antibody at 20 µg/mL.