

Mouse anti-Human CEACAM1,5 Monoclonal Antibody | anti-CEACAM1 antibody

anti-human CEACAM1, 5 monoclonal antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71487	Mouse	Human	Immunohistochemistry, Western Blot, ELISA, ELISA, Flow Cytometry, Functional Assay

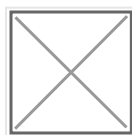
PRODUCT SYNONYMS

CEACAM1; 5; Monoclonal Antibody; anti-human CEACAM1; 5 monoclonal antibody; CD66ae; BGP; CEA; anti-CEACAM1 antibody

PRODUCT SPECIFICATIONS

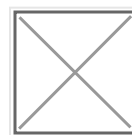
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	4/3/17
Specificity	anti-human CEACAM1, 5 (BGP, CEA, CD66a,e)
Purity/Purification	Protein G
Form/Format	Purified
Sequence Length	464
Applicable Applications for anti-CEACAM1 antibody	IHC (Immunohistochemistry), WB (Western Blot), ELISA, ELISA (Competitive ELISA), FCM/FACS (Flow Cytometry)
Buffer	phosphate buffered saline, pH 7.2
Immunogen	immunisation with extracted protein of CEACAM5
Selection	based on recognition of the complete native protein expressed on transfected mammalian cells
Immunogen	extracted protein of CEACAM5
Preparation and Storage	Short term: 2 degree C - 8 degree C; long term: -20 degree C (avoid repeated freezing and thawing)

IMAGES



Application Data

Fig. 3: Specificity testing of 4/3/17. BOSC cells were transiently transfected with expression vectors containing either the cDNA of CEACAM1, 3, 5, 6, 8 or a recombinant transmembrane-anchored PSG1 fusion protein. Expression of the constructs was confirmed with monoclonal antibodies known to recognise the corresponding proteins (CEACAM1, 3, 5 and 6: D14HD11; CEACAM8: 80H3; PSG: BAP1; green curves). An irrelevant monoclonal antibody served as a negative control (black curves). For specificity testing, protein G purified 4/3/17 was tested on all CEACAM transfectants. A positive signal was obtained with CEACAM1 and CEACAM5 expressing cells (red curves).



Application Data

Fig.2: FACS analysis of BOSC23 cells using 4/3/17 Cat.# GM- 0511. BOSC23 cells were transiently transfected with an expression vector encoding either CEACAM5 (red curve) or an irrelevant protein (control transfectant). Binding of 4/3/17 was detected with a PE conjugated secondary antibody. A positive signal was obtained only with CEACAM5 transfected cells.



Application Data

Fig.1: FACS analysis of BOSC23 cells using 4/3/17 Cat.# GM-0511. BOSC23 cells were transiently transfected with an expression vector encoding either CEACAM1 (red curve) or an irrelevant protein (control transfectant). Binding of 4/3/17 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with CEACAM1 transfected cells.

ADDITIONAL INFORMATION

Related Product Information for anti-CEACAM1 antibody	Background: CEA-related cell adhesion molecules (CEACAM) belong to the carcinoembryonic antigen (CEA) family (1). It consists of seven CEACAM (CEACAM1, CEACAM3-CEACAM8) and 11 pregnancy- specific glycoprotein (PSG1-PSG11) members. The CEA family proteins belong to the immuno-globulin (Ig) superfamily and are composed of one Ig variable-like (IgV) and a varying number (0-6) of Ig constant-like (IgC) domains. CEACAM molecules are membrane-bound either via a transmembrane domain or a glycosyl phosphatidyl inositol (GPI) anchor. CEACAM molecules are differentially expressed in epithelial cells or in leucocytes. Over-expression of CEA/CEACAM5 in tumors of epithelial origin is the basis of its wide-spread use as a tumor marker (2). CEACAM1 expression is down-regulated in many tumors indicating a tumorsuppressive function. The anti-tumor effect may be due to inhibition of tumor angiogenesis, possibly by increased secretion of anti-angiogenic molecules from the cells (3). The function of CEA family members varies widely: they function as cell adhesion molecules, tumor suppressors, regulators of lymphocyte and dendritic cell activation, receptors of Neisseria species and other bacteria (1).
References	Zimmermann W (2002). Carcinoembryonic antigen. In Wiley Encyclopedia of Molecular Medicine (T. Creighton, ed.), John Wiley & Sons Inc., New York, USA, pp. 459-462. Schölzel S, Zimmermann W, Schwarzkopf G, Grunert F, Rogaczewski B and Thompson J (2000). Carcinoembryonic antigen family members CEACAM6 and CEACAM7 are differentially expressed in normal tissues and oppositely deregulated in hyperplastic colorectal polyps and early adenomas. Am J Pathol 156, 595-605. Kleinerman DI, Troncoso P, Lin SH, Pisters LL, Sherwood ER, Brooks T, von Eschenbach AC and Hsieh JT (1995). Consistent expression of an epithelial cell adhesion molecule (C-CAM) during human prostate development and loss of expression in prostate cancer: implication as a tumor suppressor. Cancer Res 55:1215-1220.

NCBI AND UNIPROT INFORMATION

NCBI GI #	68161541
NCBI GeneID	634
NCBI Accession #	NP_001020083.1
NCBI GenBank Nucleotide #	NM_001024912.2
UniProt Accession #	P13688; O60430; Q069I7; Q13854; Q13857; Q13858; Q13859; Q13860; Q15600; Q15601; A6NE38; A8MY49
Molecular Weight	39,871 Da
NCBI Official Full Name	carcinoembryonic antigen-related cell adhesion molecule 1 isoform 2
NCBI Official Synonym Full Names	carcinoembryonic antigen-related cell adhesion molecule 1 (biliary glycoprotein)
NCBI Official Symbol	CEACAM1
NCBI Official Synonym Symbols	BGP; BGP1; BGPI
NCBI Protein Information	carcinoembryonic antigen-related cell adhesion molecule 1; antigen CD66; CD66a antigen
UniProt Gene Name	CEACAM1
UniProt Synonym Gene Names	BGP; BGP1; BGP-1
UniProt Entry Name	CEAM1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/monoclonal/ceacam1-5-antibody-clone-4-3-17-immunohistochemistry-western-blot-competitive-elisa-flow-cytometry-elisa/71487>