

Mouse anti-Human CEACAM1,3,4,5,6 Monoclonal Antibody | anti-CEACAM1 antibody

anti-human CEACAM1,3,4,5,6 monoclonal antibody

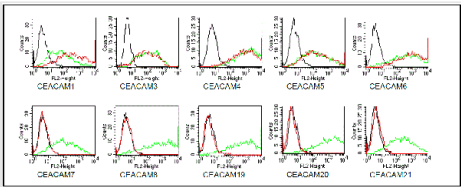
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71461	Mouse	Human	Immunohistochemistry, Immunofluorescence, Immunoprecipitation, Western Blot, ELISA, ELISA, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

CEACAM1; 3; 4; 5; 6; Monoclonal Antibody; anti-human CEACAM1; 6 monoclonal antibody; CD66acde; CGM7; anti-CEACAM1 antibody

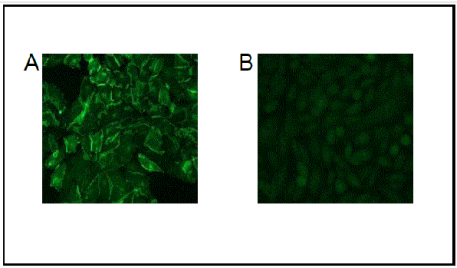
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	D14HD11
Specificity	anti-human CEACAM1,3,4,5,6 (CD66a,c,d,e,CGM7)
Purity/Purification	Protein G
Form/Format	Purified
Sequence Length	464
Applicable Applications for anti-CEACAM1 antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), IP (Immunoprecipitation), 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)



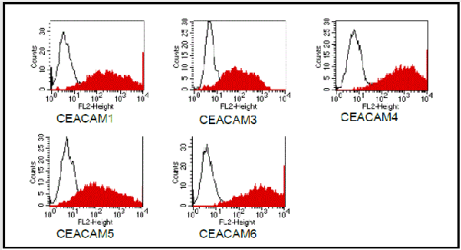
Application Data

Fig. 1: BOSC cells were transiently transfected with expression vectors containing either the cDNA of CEACAM1, CEACAM3- CEACAM8 or CEACAM19-21. Recognition of CEACAM4 was tested on CHO cells stably transfected with a CEACAM4 expression vector. Expression of the constructs was confirmed with monoclonal antibodies known to recognise the corresponding proteins (CEACAM1: 4/3/17, CEACAM3,4: D14HD11, CEACAM5: 26/3/13, CEACAM6: 9A6, CEACAM7: BAC2, CEACAM8: GM-2H6, CEACAM19-21: anti-myc, green curves). An irrelevant monoclonal antibody served as a negative control (black curves). For specificity testing, protein G purified D14HD11 was tested on all CEACAM transfectants. A positive signal was obtained with CEACAM1, CEACAM3, CEACAM4, CEACAM5 and CEACAM6 expressing cells (red curves).



Application Data

Fig. 2:Immunofluorescence Microscopy of CHO cells using D14HD11 Cat.# GM-0505. CHO cells were transfected with an expression vector encoding CEACAM1 (A). Untransfected CHO parental cells served as negative control (B). Binding of D14HD11 was visualized with a FITC-conjugated secondary antibody.



Application Data

Fig.1: FACS analysis of BOSC23 cells using D14HD11 Cat.# GM-0505. BOSC23 cells were transiently transfected with an expression vector encoding either CEACAM1,3,4,5,6 (red curves) or an irrelevant protein (control transfectant: black curves). Binding of D14HD11 was detected with a PEconjugated secondary antibody. A positive signal was obtained only with CEACAM1, CEACAM3, CEACAM4, CEACAM5 and CEACAM6 expressing 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). The CEA family proteins belong to the immunoglobulin (Ig) superfamily and are composed of one Ig variable-like (IgV) and a varying number (0-6) of Ig constant-like (IgC) domains (1,2). CEACAM molecules are membrane-bound either via a transmembrane domain or a glycosylphosphatidyl inositol (GPI) anchor. CEACAM molecules are differentially expressed in epithelial cells or in leucocytes. Over-expression of CEA/CEACAM5 in tumours of epithelial origin is the basis of its wide-spread use as a tumour marker (2). The function of CEACAM family members varies widely: they function as cell adhesion molecules, tumour 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. Hammarström S (1999). The carcinoembryonic antigen (CEA) family: structures, suggested functions and expression in normal and malignant tissues. Semin. Cancer Biol. 9, 67-81. Grunert F, AbuHarfeil N, Schwarz K and von Kleist S (1985). Two CEA and three NCA species, although distinguishable by monoclonal antibodies, have nearly identical peptide patterns. Int. J. Cancer 36, 357-362. Grunert F, Stocks SC, Nagel G., Zimmermann W, Thompson JA, Jantscheff P and Kromer B. (1996). CD66 family Workshop: Binding of myeloid blind panel antibodies and CD66 Subsection antibodies to HeLa transfectants expressing individual CD66 molecules. In Leukocyte Typing VI: White cell Differentiation Antigens (T. Kishimoto et al., eds.), Garland Publishing Inc., New York and London, pp. 1012-1025.

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.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/ceacam1-3-4-5-6-antibody-clone-d14hd11-immunohistochemistry-immunofluorescence-immunoprecipitation-western-blot-competitive-elisa-flow-cytometry-elisa/71461>