

Rabbit anti-Human CEA/CEACAM5 Polyclonal Antibody | anti-CEA/CEACAM5 antibody

Anti-CEA/CEACAM5 Antibody Picoband

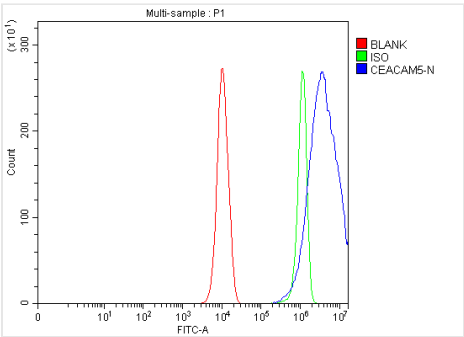
CATALOG # AAA126981	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA, Flow Cytometry, Functional Assay, Western Blot
-------------------------------	-----------------------	----------------------------	--

PRODUCT SYNONYMS

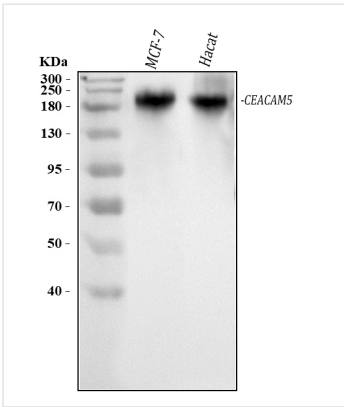
CEA/CEACAM5; Polyclonal Antibody; Anti-CEA/CEACAM5 Antibody Picoband; Leptin receptor; carcinoembryonic antigen related cell adhesion molecule 5; Carcinoembryonic antigen-related cell adhesion molecule 5; Carcinoembryonic antigen; CEA; Meconium antigen 100; CD66e; CEACAM5; anti-CEA/CEACAM5 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in columnar epithelial and goblet cells of the colon (at protein level)(PubMed:10436421). Found in adenocarcinomas of endoderally derived digestive system epithelium and fetal colon.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-CEA/CEACAM5 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human CEA/CEACAM5 recombinant protein (Position: N553-G678).
Subcellular Localization	Cytoplasmic granule. Cytoplasmic granules of cytolytic T-lymphocytes and natural killer cells
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Cell surface glycoprotein that plays a role in cell adhesion, intracellular signaling and tumor progression (PubMed:2803308, PubMed:10910050, PubMed:10864933). 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). (Microbial infection) Receptor for E coli Dr adhesins. Binding of E coli Dr adhesins leads to dissociation of the homodimer.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of PC-3 cells using anti-CEA/CEACAM5 antibody (AAA126981).Overlay histogram showing PC-3 cells stained with AAA126981 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CEA/CEACAM5 Antibody (AAA126981, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)
Figure 1. Western blot analysis of CEA/CEACAM5 using anti-CEA/CEACAM5 antibody (AAA126981).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human MCF-7 whole cell lysates,Lane 2: human HacaT whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CEA/CEACAM5 antigen affinity purified polyclonal antibody (#AAA126981) at 0.25ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CEA/CEACAM5 at approximately 200 kDa. The expected band size for CEA/CEACAM5 is at 77,180-200 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CEA/CEACAM5 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-CEA/CEACAM5 antibody	Primary Antibodies; Adaptive Immunity; Apoptosis; Cell Biology; Immunology; Innate Immunity; NK Cells; T Cells
References	1. Barnett, T.; Goebel, S. J.; Nothdurft, M. A.; Elting, J. J. : Carcinoembryonic antigen family: characterization of cDNAs coding for NCA and CEA and suggestion of nonrandom sequence variation in their conserved loop-domains. Genomics 3: 59-66, 1988.2. Gold, P.; Freedman, S. O. : Demonstration of tumor-specific antigens in human colonic carcinomata by immunological tolerance and absorption techniques. J. Exp. Med. 121: 439-462, 1965.

NCBI AND UNIPROT INFORMATION

NCBI GI #	317373456
NCBI GeneID	1048
UniProt Accession #	P06731; H9KVA7
Molecular Weight	76,795 Da
NCBI Official Full Name	Carcinoembryonic antigen-related cell adhesion molecule 5
NCBI Official Synonym Full Names	carcinoembryonic antigen-related cell adhesion molecule 5
NCBI Official Symbol	CEACAM5
NCBI Official Synonym Symbols	CEA; CD66e
NCBI Protein Information	carcinoembryonic antigen-related cell adhesion molecule 5; meconium antigen 100
UniProt Protein Name	Carcinoembryonic antigen-related cell adhesion molecule 5

UniProt Gene Name	CEACAM5
UniProt Synonym Gene Names	CEA; CEA
UniProt Entry Name	CEAM5_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/polyclonal/cea-ceacam5-antibody-flow-cytometry-western-blot-elisa/126981>