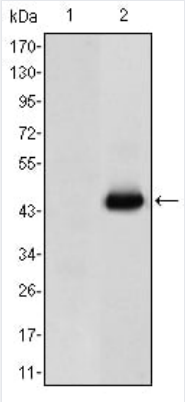
CEA Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	CEA, Monoclonal Antibody
Full Product Name	CEA Antibody
Product Gene Name	anti-CEA antibody
Product Synonym Names	Carcinoembryonic antigen; Carcinoembryonic antigen-related cell adhesion molecule 5; CD66e; CEA; Ceacam5; CEAM5_HUMAN; DKFZp781M2392; Meconium antigen 100; OTTHUMP00000199032; OTTHUMP00000199033; OTTHUMP00000199034
Clonality	Monoclonal
Isotype	IgG1
Host	Mouse
Species Reactivity	Human
Form/Format	Phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	Affinity-Chromatography
Concentration	1mg/ml (lot specific)
Specificity	CEA antibody detects endogenous levels of total CEA
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	CEA peptide (MBS9619823) is used for blocking the activity of CEA antibody (MBS9602369)
Molecular Weight	Observed: 77 kDa Predicted: 77 kDa
3D Structure	ModBase 3D Structure for P06731
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Immunogen	Purified recombinant fragment of human CEA expressed in E. Coli
Subcellular Location	Cell Membrane
Tissue Specificity	Found in adenocarcinomas of endodermally derived digestive system epithelium and fetal colon.
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CEA antibody	Western Blot (WB), Immunohistochemisty (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC), ELISA (EIA)
Application Notes for anti-CEA antibody	ELISA: 1:10000 WB: 1:500-1:2000 IHC: 1:200 ICC: 1:200-1:1000

Related Product Information for anti-CEA antibody	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+). Function: Cell surface glycoprotein that plays a role in cell adhesion and in intracellular signaling. Receptor for E.coli Dr adhesins. Subunit Structure: Homodimer. Binding of E.coli Dr adhesins leads to dissociation of the homodimer. Post-translational Modifications: Complex immunoreactive glycoprotein with a MW of 180 kDa comprising 60% carbohydrate. Similarity: Belongs to the immunoglobulin superfamily. CEA family.
Other Notes	Small volumes of anti-CEA antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CEA purchase	MBS9602369 is an antibody targeting CEA. Also known as CEA Antibody. Reactive in Human. Host: Mouse.



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

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CEA. It may not necessarily be applicable to this product.

NCBI GI #	612407802
NCBI GeneID	1048
NCBI Accession #	NP_001278413.1
UniProt Primary Accession #	P06731
UniProt Secondary Accession #	H9KVA7
UniProt Related Accession #	P06731
GenBank Nucleotide #	NM_001291484.2
NCBI Official Full Name	carcinoembryonic antigen-related cell adhesion molecule 5 isoform 1 preproprotein
NCBI Official Synonym Full Names	carcinoembryonic antigen related cell adhesion molecule 5
NCBI Official Symbol	CEACAM5
NCBI Official Synonym Symbols	CEA; CD66e
UniProt Protein Name	Carcinoembryonic antigen-related cell adhesion molecule 5
UniProt Synonym Protein Names	Carcinoembryonic antigen; CEA; Meconium antigen 100; CD_antigen: CD66e
Protein Family	Colicin

UniProt Gene Name	CEACAM5
UniProt Synonym Gene Names	CEA; CEA
NCBI Protein Information	carcinoembryonic antigen-related cell adhesion molecule 5
NCBI Summary for CEA	This gene encodes a cell surface glycoprotein that represents the founding member of the carcinoembryonic antigen (CEA) family of proteins. The encoded protein is used as a clinical biomarker for gastrointestinal cancers and may promote tumor development through its role as a cell adhesion molecule. Additionally, the encoded protein may regulate differentiation, apoptosis, and cell polarity. This gene is present in a CEA family gene cluster on chromosome 19. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2015]
UniProt Comments for CEA	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).
Research Articles on CEA	**1.** CEA and CA19-9 are cancer antigens that are late markers of carcinogenesis, with significantly elevated serum concentrations in case of colon cancer with already developed metastases. Older age group of patient has significantly elevated levels of both antigens. Cancer was twice more common in men than in women.
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