

Carcinoembryonic Antigen (CEA) Active Protein | CEA active protein

Active Carcinoembryonic Antigen (CEA)

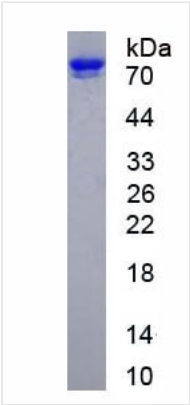
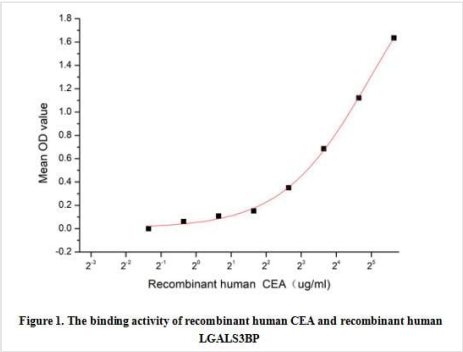
CATALOG # AAA161710	HOST 293F cell	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Carcinoembryonic Antigen (CEA); Active Carcinoembryonic Antigen (CEA); Carcinoembryonic Antigen; CEA active protein (eukaryotic; 293F cell); Human; CD66E; CD66; CEACAM5; Carcinoembryonic Antigen-related Cell Adhesion Molecule 5; Carcinoembryonic Antigen4; CEA active protein

PRODUCT SPECIFICATIONS

Host	293F cell
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Lys35~Ala6 85
Applicable Applications for CEA active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Eukaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	5.4
Research Area	Tumor immunity, Gastroenterology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



SDS-PAGE
Figure. SDS-PAGE

Bioactivity
Carcinoembryonic antigen (CEA), as one of the common tumor markers, is a human glycoprotein involved in cell adhesion and is expressed during human fetal development. Since the birth of human, CEA expression is largely inhibited, with only low levels in the plasma of healthy adults. Generally, CEA will overexpressed in many cancers, including gastric, breast, ovarian, lung, and pancreatic cancers, especially colorectal cancer. The lectin galactoside-binding soluble 3 binding protein (LGALS3BP) is also a secreted, which was first identified as cancer and metastasis associated protein. LGALS3BP has been identified as an interactor of CEA, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human CEA and recombinant human LGALS3BP. Briefly, biotin-linked CEA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to LGALS3BP-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 ul stop solution to the wells and read at 450 nm immediately. The binding activity of CEA and LGALS3BP was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for CEA active protein	Active proteins
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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.

