

32-13141: CEA Human, His

Alternative Name : Carcinoembryonic Antigen Related Cell Adhesion Molecule 5, Carcinoembryonic Antigen-Related Cell Adhesion Molecule 5, Meconium Antigen 100, CEA, Carcinoembryonic Antigen, CD66e Antigen, CD66e, Carcinoembryonic antigen-related cell adhesion molecule 5, Carcinoembryonic antigen, CEA.

Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

Carcinoembryonic antigen (CEA) is a glycoprotein present in fetal digestive-tract tissues; it's involved in cell adhesion. The production of CEA stops before birth. CEA is called tumor marker since its elevated levels are found in the serum from individuals with colorectal, gastric, pancreatic, lung and breast carcinomas and in heavy smokers. There are also benign conditions that elevate CEA levels such as smoking, infection, inflammatory bowel disease, pancreatitis, cirrhosis of the liver, and some benign tumors (in the equivalent organs which have cancers with elevated CEA). Typically, higher levels of CEA are found in men, smokers, and older individuals. The presence of CEA assists in screening, in evaluating recurrent or disseminated disease, and in determining the success of surgical removal of malignant tumors. CEA levels can be used as indicators of treatment success. The normal values range from 0.0 to 2.5 ng/ml of serum (from blood), in non-smokers, a greater amount than that may be suggestive of cancer. Levels above 20 ng/ml before treatment are associated with cancer which has already metastasized. Benign conditions do not usually cause a CEA increase over 10 ng/ml. The high levels of CEA should return to normal after successful therapy, however if during follow up there's an elevation in CEA levels it indicates a recurrence of tumor. Carcinoembryonic antigen family belongs to the immunoglobulin superfamily; it consists of 29 genes, 18 of which are normally expressed.

CEA Human Recombinant produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 659 amino acids (35-685a.a.) and having a molecular mass of 72.3kDa (Molecular size on SDS-PAGE will appear at approximately 70-150kDa). CEA is expressed with an 8 amino acids His tag at C-Terminus and purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Content : CEA protein solution (0.5mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : KLTIESTPFN VAEGKEVLLL VHNLPQHFLG YSWYKGERVD GNRQIIGYVI GTQQATPGPA
YSGREIIPN ASLLIQNIIQ NDTGFYTLHV IKSDLVNEEA TGQFRVYPEL PKPSISSNNS
KPVEDKDAVA FTCEPETQDA TYLWWVNNQS LPVSPRLQLS NGNRTLTLFN
VTRNDTASYK CETQNPVSAR RSDSVILNVLYGPDAPTISP LNTSYRSGEN LNLSCHAASN
PPAQYSWFVN GTFQQSTQEL FIPNITVNNNS GSYTCQAHNS DTGLNRTTVT TITVYAEPPK
PFITSNNSNP VEDEDAVALT CEPEIQNTTY LWWWNNQSLP VSPRLQLSND NRTLTLTLLSVT
RNDVGPYECG IQNKLSVDHS DPVILNVLYG PDDPTISPSY TTYRPGVNLS LSCHAASNPP
AQYSWLIDGN IQQHTQELFI SNITEKNSGL YTCQANNSAS GHSRTTVKTI TVSAELPKPS
ISSNNSKPVE DKDAVAFTCE PEAQNTTYLW WVNGQSLPVS PRLQLSNGNR TLTLFNVTRN
DARAYVCGIQ NSVSANRSDP VTLDVLYGPD TPIISPPDSS YLSGANLNLS CHSASNPSQ
YSWRINGIPQ QHTQVLFIK ITPNNGTYA CFVSNLATGR NNSIVKSITV SASGTSPGLS
ALEHHHHHH.