



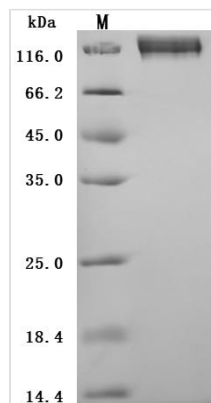
Recombinant Human Carcinoembryonic antigen-related cell adhesion molecule 5 (CEACAM5) (E398K) (Active)

Product Code	CSB-MP005165HU
Abbreviation	Recombinant Human CEACAM5 protein (E398K) (Active)
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P06731
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 µm filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized Human CEACAM5 at 2µg/mL can bind Anti-CEACAM5 recombinant antibody (CSB-RA005165MA1HU), the EC50 is 0.8955-1.719 ng/mL.
Purity	Greater than 95% as determined by SDS-PAGE.
Sequence	KLTIESTPFNVAEGKEVLLLVHNLQPQHFLFGYSWYKGERVDGNRQIIGYVIGTQQ ATPGPAYSGREIIPNASLLIQNIIQNDTGFTLHVIKSDLVNEEATGQFRVYPEL PKPSSNNNSKPVEDKDAVAFTCEPETQDATYLWWVNNQSLPVSRLQLSNG NRTLTLFNVTRNDTASYKCETQNPVSARRSDSVILNVLYGPDAPTISPLNTSYR SGENLNLSCHAASNPPAQYSWVNGTFQQSTQELFIPNITVNNSGSYTCQAH NSDTGLNRTTVTTITVYAEPKPFITSNNSNPVEDEDAVALTCEPEIQNTTYLW WVNNQSLPVSRLQLSNDNRTLTLSSVTRNDVGPYECGIQNKLSVDHSDPVIL NVLYGPDDPTISPSYTYRPGVNLSSLSCHAASNPPAQYSWLIDGNIQQHTQEL FISNITEKNSGLYTCQANNSASGHSRTTVKTITVSAELPKPSSNNNSKPVEDKD AVAFTCEPEAQNTTYLWWVNGQSLPVSRLQLSNGNRTLTLFNVTRNDARAY VCGIQNSVSANRSDPVTLDVLYGPDTPISPPDSSYLSGANLNLSCHSASNPS QYSWRINGIPQQHTQVLFIKITPNNNGTYACFVSNLATGRNNSIVKSITVSASG TSPGLSA
Research Area	Cancer
Source	Mammalian cell
Target Names	CEACAM5
Expression Region	35-685aa(E398K)
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

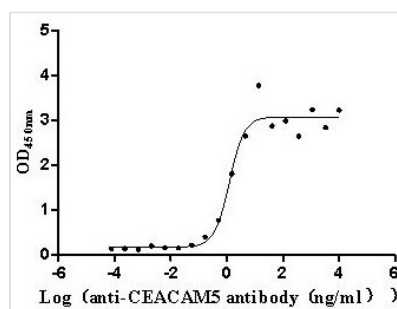


Tag Info	C-terminal 10xHis-tagged
Mol. Weight	74.1 kDa
Protein Length	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Activity

Measured by its binding ability in a functional ELISA. Immobilized Human CEACAM5 at 2μg/mL can bind Anti-CEACAM5 recombinant antibody (CSB-RA005165MA1HU), the EC₅₀ is 0.8955-1.719 ng/mL.

Description

This Human CEACAM5 recombinant protein was produced in mammalian cell, where the gene sequence encoding Human CEACAM5 (expression area: 35-685aa; mutation site: E398K) was expressed with the C-terminal 10xHis tag. The purity of this CEACAM5 protein was greater than 95%. The activity was validated.

CEACAM5 (known as CEA, CD66e) belongs to the carcinoembryonic antigen CEACAM subfamily of the immunoglobulin superfamily. It is a homodimeric protein and cell surface glycoprotein that is overexpressed in many cancers and has been implicated in adhesion and invasion.

CEACAM5 is predominantly expressed by epithelial cells and is differentially expressed between species. In normal adult tissues, CEACAM5 is located in the stomach, tongue, esophagus, cervix, sweat glands and prostate. High CEACAM5 can be detected in tumor cells of advanced non-small cell lung cancer, small cell lung cancer, pancreatic cancer, gallbladder cancer, bladder cancer, mucinous ovarian cancer, endometrial cancer, colorectal cancer and gastric cancer.

CEACAM5 protein has a long history as a tumor biomarker. In 1965, researchers first discovered that CEA can be used as a marker of colorectal cancer, suggesting its significance in cancer research. The development of highly active and stable mammalian CEACAM5 protein will help to better study the mechanism and signaling pathway of CEACAM5 in the human body and



help the research of related clinical drugs.

Endotoxin	Less than 1.0 EU/ug as determined by LAL method.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.