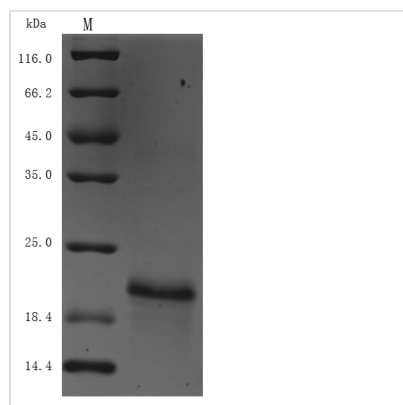


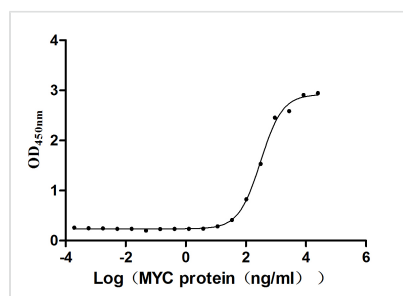


Recombinant Human papillomavirus type 16 Protein E7 (E7) (Active)

Product Code	CSB-EP365855HMLg5
Abbreviation	Recombinant Human papillomavirus type 16 E7 protein
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.	P03129
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	Human papillomavirus type 16
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized HPV16 E7 at 10 µg/mL can bind Biotinylated MYC-CSB-EP015270HU-B?, the EC ₅₀ is 268.1-354.3 ng/mL.
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEEDEIDGPAGQAEPDRAHY NIVTFCKKCDSTLRCLVQSTHVDIRTLEDLLMGTLGIVCPICSQKP
Research Area	Microbiology
Source	E.coli
Target Names	E7
Expression Region	1-98aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged and C-terminal 6xHis-tagged
Mol. Weight	16.3 kDa
Protein Length	Full Length
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 HPV16 E7 at 10 µg/ml can bind Biotinylated MYC?CSB-EP015270HU-B?, the EC₅₀ is 268.1-354.3 ng/mL.

Description

Recombinant human papillomavirus 16 E7 protein is an Escherichia coli full-length protein tagged with 6xHis at both the N-terminus and C-terminus. Its encoding region corresponds to 1 to 98 AA of the human papillomavirus type 16 E7 protein. It is characterized by high purity (> 90%, SDS-PAGE) and biological activity. Under the reducing conditions, this E7 protein has an apparent molecular mass of approximately 20 kDa. The activity of this E7 protein was assessed by binding it to the biotinylated MYV in a functional ELISA, and the EC₅₀ is 268.1-354.3 ng/mL. This E7 protein may be used in the studies of human papillomavirus type 16-associated infection. It is in stock now.

E7, one of the major HPV oncoproteins, activates the cell cycle progression by promoting the degradation of the inactivation of retinoblastoma protein (pRb). Kathryn H. Richards *et al.* demonstrated that E7 is the major inhibitor of imiquimod-induced inflammatory responses in primary keratinocytes.

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.