Data Sheet (Cat.No.TMPK-01467)

TargetMol

HLA-A*02:01&B2M&HPV 16 E6 (KLPQLCTEL) Monomer Protein, Human, MHC (His & Avi)

General Information

Synonyms:	HPV16;E6;Human papillomavirus type 16
Protein Construction:	Gly25-Thr305(HLA-A*02:01),Ile21-Met119(B2M) and KLPQLCTEL peptide
Species:	Human
Expression Host:	HEK293 Cells
Accession:	A0A140T913(HLA-A*02:01)&P61769(B2M)&KLPQLCTEL
Molecular Weight:	The protein has a predicted MW of 50.50 kDa. Due to glycosylation, the protein migrates to 53-63 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Human papillomavirus (HPV) 16 infection is a necessary condition for the pathogenesis and development of cervical cancer. The E6 protein is expressed by the HPV16 E6 gene and promotes malignant phenotype transformation, which is an important mechanism for the occurrence and development of cervical cancer.

Reference

Zhang L, et al. HPV16 E6 regulates the proliferation, invasion, and apoptosis of cervical cancer cells by downregulating miR-504. Transl Cancer Res. 2020 Dec;9(12):7588-7595. doi: 10.21037/tcr-20-2913. PMID: 35117358; PMCID: PMC8799100.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481