Data Sheet (Cat.No.TMPK-01496)

TargetMol

HLA-A*01:01&B2M&CT83 (NTDNNLAVY) Monomer Protein, Human, MHC (His & Avi)

General Information

Synonyms:	HLA-A;CT83;HLA-A*0101;HLA class I;MHC class I;MHC;MHC HLA-A alpha
Protein Construction:	Gly25-Thr305(HLA-A*01:01),Ile21-Met119(B2M) and NTDNNLAVY peptide
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q5SUL5(HLA-A*01:01)&P61769(B2M)&NTDNNLAVY
Molecular Weight:	The protein has a predicted MW of 50.30 kDa. Due to glycosylation, the protein migrates to 55-65 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

Cancer/testis antigens 83 (CT83), also called KK-LC-1 or CXorf61, recognized by cytotoxic T lymphocytes (CTL), has become a promising target for immunotherapy.

Reference

Ye Z, et al. Targeted photodynamic therapy of cancer using a novel gallium (III) tris (ethoxycarbonyl) corrole conjugated-mAb directed against cancer/testis antigens 83. Cancer Med. 2018 Jun 1;7(7):3057-65. doi: 10.1002/cam4.1601. Epub ahead of print. PMID: 29856138; PMCID: PMC6051178.