Data Sheet (Cat.No.TMPK-01472)

TargetMol

HLA-A*24:02&B2M&MAGE-A3 (IMPKAGLLI) Tetramer Protein, Human, MHC (His & Avi)

General Information

Synonyms:	MAGE-3;CT1.3;Melanoma-associated antigen 3;MZ2D;MZ2-D;HLA-A*24:02;HLA-A2402
Protein Construction:	Gly25-Thr305(HLA-A*24:02), Ile21-Met119(B2M)and IMPKAGLLI peptide. Tetramer is assembled by biotinylated monomer and streptavidin.
Species:	Human
Expression Host:	HEK293 Cells
Accession:	AAA59600.1(HLA-A*24:02)&P61769(B2M)&IMPKAGLLI
Molecular Weight:	The protein has a predicted MW of 258 kDa. Due to glycosylation, the protein migrates to 260-265 kDa under Non reducing (N) condition 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

Melanoma antigen gene A3 (MAGE-A3) is one of the most immunogenic cancer testis antigens and is common in various types of cancers. MAGE-A3 can be considered as a predictor for poor prognosis and an option for vaccine immunotherapy in patients with PCa.

Reference

Khalvandi A, et al. Nuclear overexpression levels of MAGE-A3 predict poor prognosis in patients with prostate cancer. APMIS. 2021 Jun;129(6):291-303. doi: 10.1111/apm.13132. Epub 2021 Apr 13. PMID: 33743542.

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