Data Sheet (Cat.No.TMPK-01522)

TargetMol

Chimeric HLA-A*02:01 (mα3) &B2M&WT-1 (RMFPNAPYL) Tetramer Protein, Human&Mouse, MHC

General Information

Synonyms:	RMF;WT33;WIT-2;MHC;WAGR;AWT1;GUD;WT1;NPHS4GUD
Protein Construction:	Gly25-Thr206(Human HLA-A*02:01 α1&α2)&Asp207-Glu299(Mouse H-2Ld α3), Ile21-Met119 (B2M) and RMFPNAPYL peptide. Tetramer is assembled by biotinylated monomer and streptavidin.
Species:	Human & Mouse
Expression Host:	HEK293 Cells
Accession:	A0A140T913(Human HLA-A*02:01 α1&α2)&P01897(Mouse H-2Ld α3)&P61769(B2M) &RMFPNAPYL
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:	Immobilized Chimeric HLA-A*02:01 (mα3) &B2M&WT-1 (RMFPNAPYL) Tetramer, His Tag at 2μg/ml (100μl/well) on the plate. Dose response curve for Anti-HLA-A*02:01&B2M&WT-1 (RMFPNAPYL) Antibody, hFc Tag with the EC50 of 6.3ng/ml determined by ELISA.
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

The WT1 protein plays a role in cell growth, the process by which cells mature to perform specific functions (differentiation), and the self-destruction of cells (apoptosis). WT1 is differentially expressed in serous,

endometrioid, clear cell, and mucinous carcinomas of the peritoneum, fallopian tube, ovary, and endometrium. The Human HLA-A*0201 WT-1 (RMFPNAPYL) complex Protein is a complex of HLA-A*0201 of the MHC Class I, B2M and RMFPNAPYL peptide of the WT-1.

Reference

Dao T, et al. Therapeutic bispecific T-cell engager antibody targeting the intracellular oncoprotein WT1[J]. Nature Biotechnology, 2015.