



Synonym

HLA-A\*02:01 & B2M & MAGE-A4 (KVLEHVVRV)

Source

Human HLA-A\*02:01&B2M&MAGE-A4 (KVLEHVVRV) Tetramer Protein(HLK-H52E5) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Ile 308 (HLA-A\*02:01) & Ile 21 - Met 119 (B2M) & KVLEHVVRV peptide (Accession # [AAA59606.1](#) (HLA-A\*02:01) & [P61769-1](#) (B2M) & KVLEHVVRV).  
Predicted N-terminus: Gly 25 & Ile 21

Molecular Characterization

Human HLA-A\*02:01&B2M&MAGE-A4 (KVLEHVVRV) Tetramer Protein is assembled by biotinylated monomer and streptavidin.

Biotinylated Human HLA-A\*02:01&B2M&MAGE-A4 (KVLEHVVRV) Complex Protein is produced by co-expression of HLA and B2M loaded with MAGE-A4 peptide. Biotinylated Human HLA-A\*02:01&B2M&MAGE-A4 (KVLEHVVRV) Complex Protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 36.3 kDa, 13.3 kDa and 11.7 kDa. The protein migrates as 40-45 kDa, 15 kDa and 13 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.  
>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.  
Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.  
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

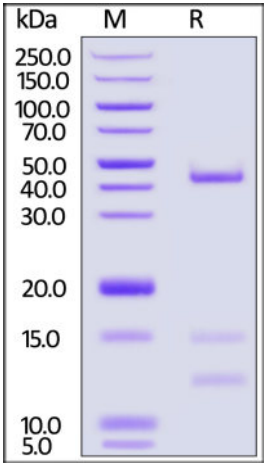
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.  
*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

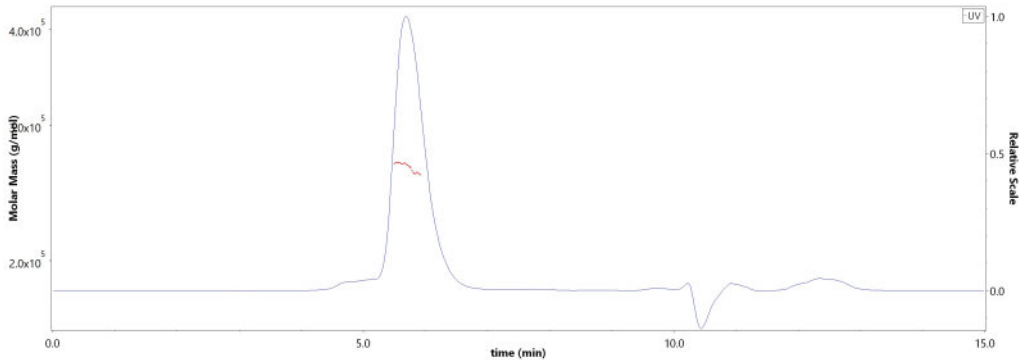
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human HLA-A\*02:01&B2M&MAGE-A4 (KVLEHVVRV) Tetramer Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

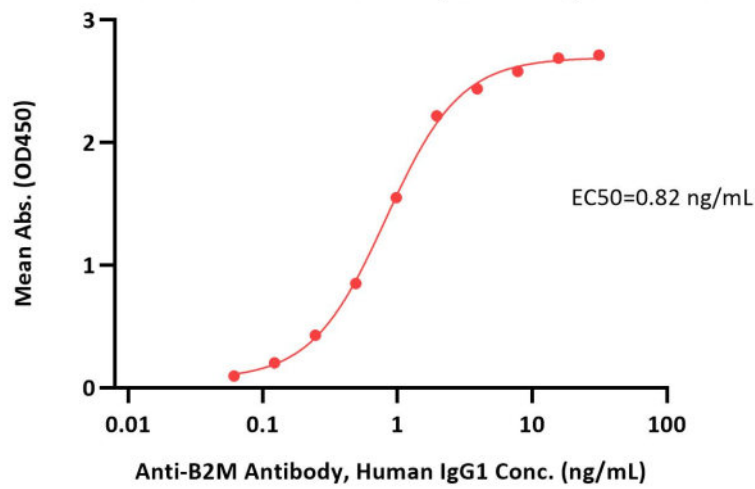


The purity of Human HLA-A\*02:01&B2M&MAGE-A4 (KVLEHVVRV) Tetramer Protein (Cat. No. HLK-H52E5) is more than 90% and the molecular weight of this protein is around 250-280 kDa verified by SEC-MALS.  
[Report](#)

Bioactivity-ELISA



Human HLA-A\*02:01&B2M&MAGE-A4 (KVLEHVVRV) Tetramer Protein ELISA  
0.1 µg of Human HLA-A\*02:01&B2M&MAGE-A4 (KVLEHVVRV) Tetramer Protein per well



Immobilized Human HLA-A\*02:01&B2M&MAGE-A4 (KVLEHVVRV) Tetramer Protein (Cat. No. HLK-H52E5) at 1 µg/mL (100 µL/well) can bind Anti-B2M Antibody, Human IgG1 with a linear range of 0.06-2 ng/mL (Routinely tested).

Background

The MAGE A4 antigen is a cancer-testis antigen and is expressed intracellularly in various solid tumor tissues, MAGE A4230-239 peptide (GVYDGREHTV) is a cytotoxic T lymphocyte (CTL) epitope presented by HLA-A2 The Human HLA-A\*0201 MAGE-A4 (GVYDGREHTV) complex protein is a complex of HLA-A\*0201 of the MHC Class I, B2M, and GVYDGREHTV peptide of the MAGE-A4.

Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.

