

**Synonym**

HLA-A\*1101 | B2M | KRASG12D (VVGADGVGK)

**Source**

Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Tetramer Protein(HLD-H52H8) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Thr 305 (HLA-A\*11:01) & Ile 21 - Met 119 (B2M) & VVGADGVGK peptide (Accession # [Q5S3G3-1](#) (HLA-A\*11:01) & [P61769](#) (B2M) & VVGADGVGK).

Predicted N-terminus: Gly 25 &amp; Ile 21

**Molecular Characterization**

Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Tetramer Protein is assembled by biotinylated monomer and streptavidin.

Biotinylated Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein is produced by co-expression of HLA and B2M loaded with KRASG12D peptide. Biotinylated Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 36.0 kDa and 11.7 kDa. The protein migrates as 39-43 kDa, 14 kDa and 12 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

&gt;90% as determined by SDS-PAGE.

**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.*

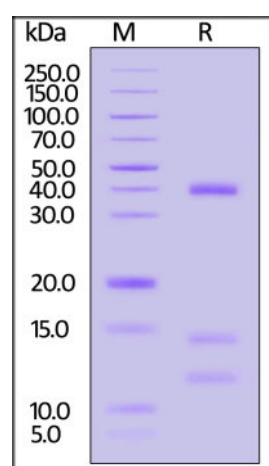
**Storage**

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:

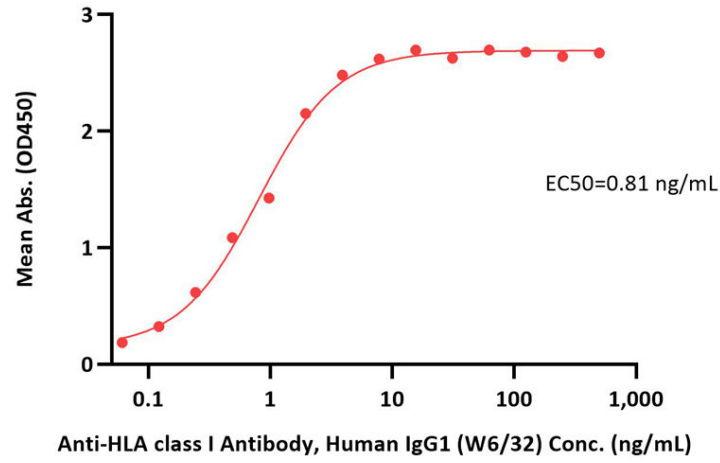
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Tetramer Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**

Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Tetramer Protein ELISA  
0.1 µg of Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Tetramer Protein per well



Immobilized Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Tetramer Protein (Cat. No. HLD-H52H8) at 1 µg/mL (100 µL/well) can bind Anti-HLA class I Antibody, Human IgG1 (W6/32) with a linear range of 0.1-2 ng/mL (QC tested).

## Background

The Kirsten rat sarcoma 2 viral oncogene homolog (KRAS) oncogene plays a critical role in the initiation and maintenance of pancreatic tumors and its signaling network represents a major target for therapeutic intervention. The Human HLA-A\*1101 KRASG12D (VVGADGVGK) complex protein is a complex of HLA-A\*1101 of the MHC Class I, B2M, and VVGADGVGK peptide of the KRASG12D.

## Clinical and Translational Updates

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