# Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein (Monomer, MALS verified)

Catalog # HLV-H52H3



# **Synonym**

HLA-A\*1101 | B2M | KRASG12V (VVGAVGVGK)

#### Source

Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein(HLV-H52H3) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Thr 305 (HLA-A\*11:01) & Ile 21 - Met 119 (B2M) & VVGAVGVGK peptide (Accession # Q5S3G3-1 (HLA-A\*11:01) & P61769 (B2M) & VVGAVGVGK).

Predicted N-terminus: Gly 25 & Ile 21

#### **Molecular Characterization**

Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein is produced by co-expression of HLA and B2M loaded with KRASG12V peptide.

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 36.0 kDa and 11.7 kDa. The protein migrates as 40-45 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**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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

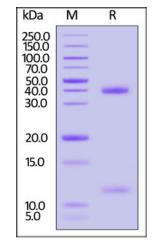
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

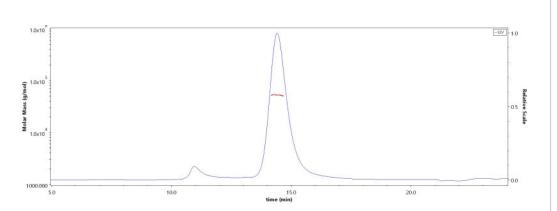
## **SDS-PAGE**



Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex 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**

## **SEC-MALS**



The purity of Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein (Cat. No. HLV-H52H3) is more than 90% and the molecular weight of this protein is around 45-60 kDa verified by SEC-MALS.

Report

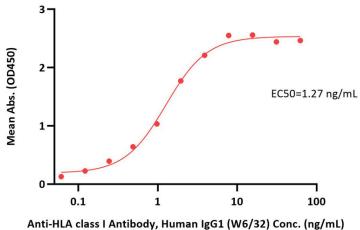


# Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein (Monomer, MALS verified)

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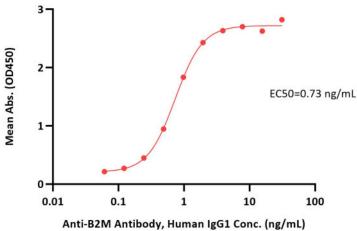


Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein ELISA 0.1  $\mu$ g of Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein per well



Immobilized Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein (Cat. No. HLV-H52H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-HLA class I Antibody, Human IgG1 (W6/32) with a linear range of 0.1-4 ng/mL (QC tested).

Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein ELISA 0.1  $\mu$ g of Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein per well



Immobilized Human HLA-A\*11:01&B2M&KRASG12V (VVGAVGVGK) Complex Protein (Cat. No. HLV-H52H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-B2M Antibody, Human IgG1 with a linear range of 0.06-1 ng/mL (Routinely 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 Biotinylated Human HLA-A\*1101 KRASG12V (VVGAVGVGK) complex protein is a complex of HLA-A\*1101 of the MHC Class I, B2M, and VVGAVGVGK peptide of the KRASG12V.

## **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

