## Alexa Fluor™ 488-Labeled Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex ProteinStar Staining (Monomer)

Catalog # HLD-HA2H7



## **Synonym**

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

#### Source

Alexa Fluor 488-Labeled Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein (HLD-HA2H7) is produced via conjugation of AF488 to Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein with a new generation site-specific technology under Star Staining labeling platform. Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein 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 & Ile 21

#### **Molecular Characterization**

Alexa Fluor 488-Labeled Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein is produced by co-expression of HLA and B2M loaded with KRAS peptide.

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

The protein has a calculated MW of 36.4 kDa and 14.0 kDa. The protein migrates as 55-60 kDa and <14 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Conjugate

AF488

Excitation Wavelength: 488 nm

Emission Wavelength: 517 nm

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### **Purity**

>90% as determined by SDS-PAGE.

#### **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

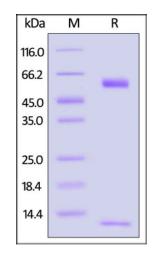
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

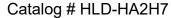
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### **SDS-PAGE**





# Alexa Fluor™ 488-Labeled Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex ProteinStar Staining (Monomer)

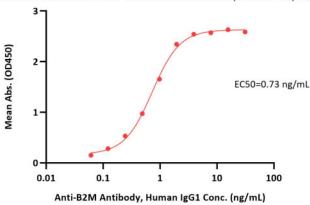




Alexa Fluor 488-Labeled Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

## **Bioactivity-ELISA**

Alexa Fluor 488-Labeled Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein ELISA 0.1  $\mu$ g of Alexa Fluor 488-Labeled Human HLA-A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein per well



Immobilized Alexa Fluor 488-Labeled Human HLA- A\*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein (Cat. No. HLD-HA2H7) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-B2M Antibody, Human IgG1 with a linear range of 0.06-2 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 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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

