

Alexa Fluor™ 488-Labeled Human HLA-A*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein (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 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

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with AF488 using standard chemical labeling method. The residual AF488 is removed by molecular sieve treatment during purification process.

Purity

>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

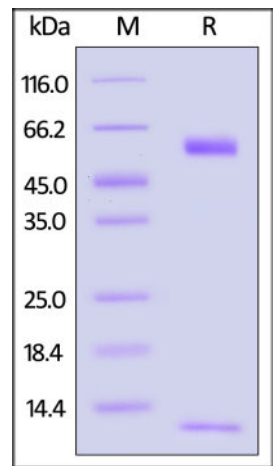
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please 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 Protein on SDS-PAGE under reducing (R)



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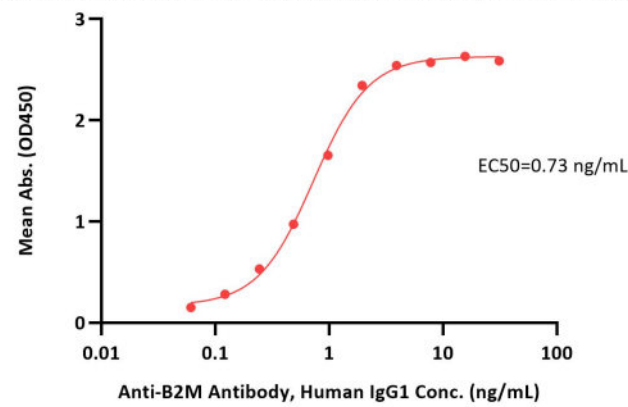
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condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA

Alexa Fluor 488-Labeled Human HLA-A*11:01&B2M&KRASG12D (VVGADGVGK) Complex Protein ELISA
0.1 µg 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 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 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.

