

# Human HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer Protein



Cat. No. MHC-HM420

## Description

<b>Source</b>	Recombinant Human HLA-A*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Gly25-Thr305(HLA-A*11:01),Ile21-Met119(B2M) and VVVGADGVGK peptide.
<b>Accession</b>	AAV53343.1(HLA-A*11:01)&P61769(B2M)&VVVGADGVGK
<b>Molecular Weight</b>	The protein has a predicted MW of 50.3 kDa. Due to glycosylation, the protein migrates to 51-60 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

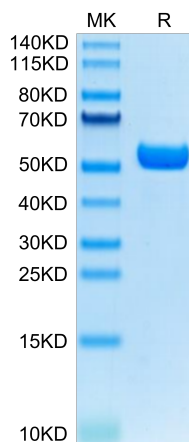
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Kirsten rat sarcoma 2 viral oncogene homolog (KRAS) is the most commonly mutated oncogene in human cancer. The developments of many cancers depend on sustained expression and signaling of KRAS, which makes KRAS a high-priority therapeutic target. The virtual screening approach to discover novel KRAS inhibitors and synthetic lethality interactors of KRAS are discussed in detail.

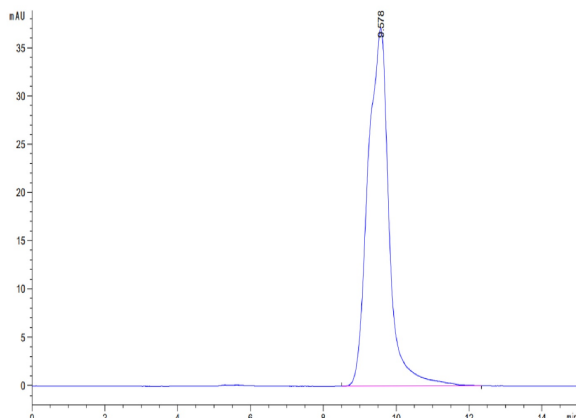
## Assay Data

### Bis-Tris PAGE



Human HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

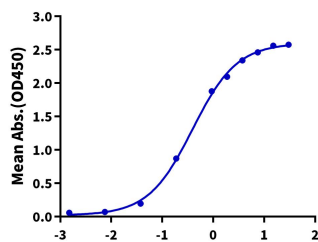


The purity of Human HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

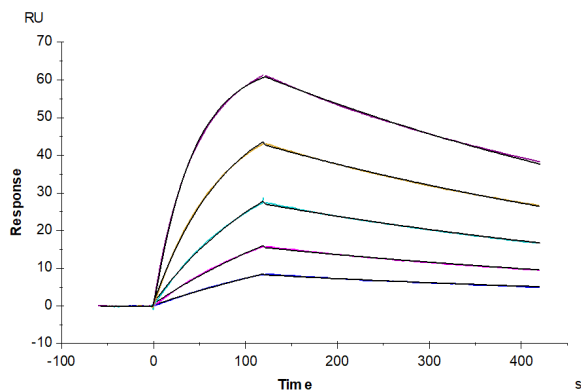
Human HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer, His Tag ELISA  
0.5µg HLA-A\*11:01&B2M&KRAS G12D TCR Per Well



Immobilized HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) TCR at 5µg/ml(100µl/well) on the plate. Dose response curve for Human HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer, His Tag with the EC50 of 0.39µg/ml determined by ELISA (QC Test).

Log Human HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer, His Tag Conc.(µg/ml)

SPR Data



Human HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer, His Tag captured on CM5 Chip via Anti-His Antibody can bind HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) TCR with an affinity constant of 14.91 nM as determined in SPR assay (Biacore T200).