

Cat. No. MHC-HM454

### Description

<b>Source</b>	Recombinant Human HLA-A*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer Protein is expressed from E.coli with 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 35.36 kDa (HLA-A*11:01) and 11.9 kDa (B2M) same as Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

### Formulation and Storage

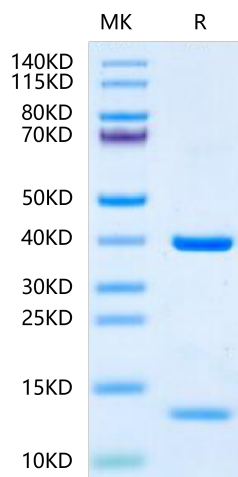
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days 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

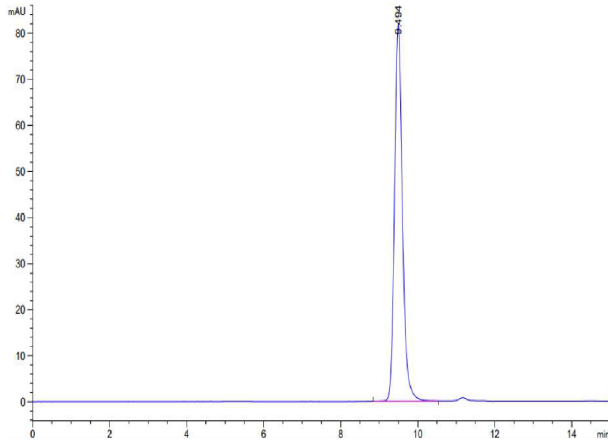
#### Tris-Bis PAGE



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

#### SEC-HPLC

Assay Data



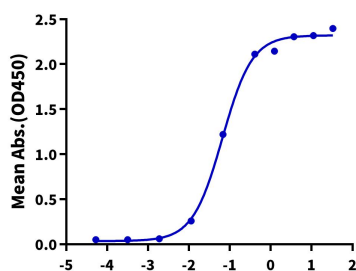
The purity of HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) Monomer is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK), His Tag ELISA

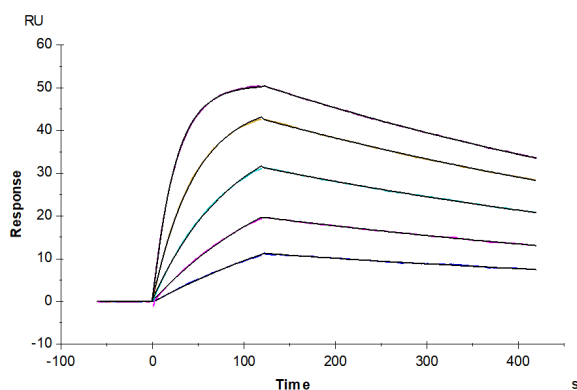
0.5µg HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK) TCR Per Well



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 66.0ng/ml determined by ELISA (QC Test).

Log Human HLA-A\*11:01&B2M&KRAS G12D (VVVGADGVGK), 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 6.93 nM as determined in SPR assay (Biacore T200).