

Cat. No. MHC-HM418T

**Description**

**Source** Recombinant Human HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Tetramer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus, tetramer is assembled by biotinylated monomer and streptavidin.

It contains Gly25-Thr305(HLA-A\*03:01),Ile21-Met119(B2M) and VVVGAVGVGK peptide.

**Accession** NP\_002107.3(HLA-A\*03:01)&P61769(B2M)&VVVGAVGVGK

**Molecular Weight** The protein has a predicted MW of 258 kDa. Due to glycosylation, the protein migrates to 260-265 kDa under Non reducing (N) condition based on Tris-Bis PAGE result.

**Endotoxin** Less than 1EU per ug by the LAL method.

**Purity** > 95% as determined by Tris-Bis PAGE

> 95% as determined by HPLC

**Formulation and Storage**

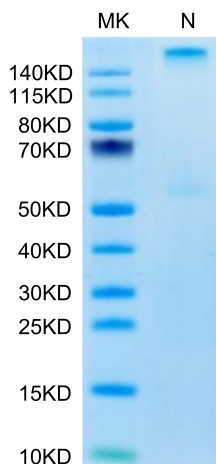
**Formulation** Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

**Reconstitution** Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.

**Storage** -20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state 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**

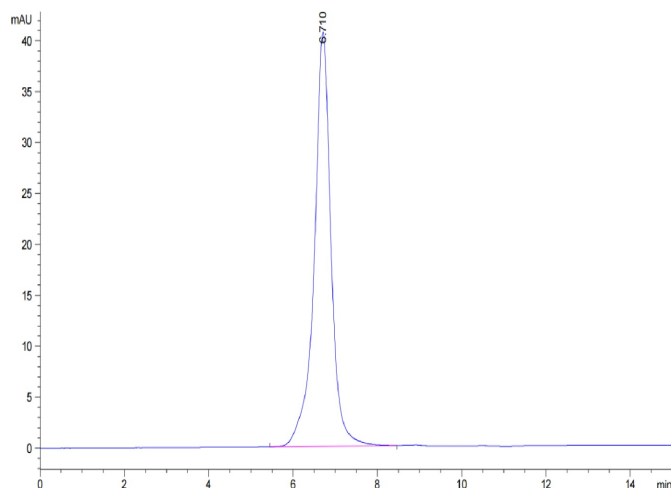
Kirsten rat sarcoma 2 viral oncogene homolog (KRAS) is the most commonly mutated oncogene in human cancer. The developments of many cancers depend on sustained expression and signaling of KRAS, which makes KRAS a high-priority therapeutic target. The virtual screening approach to discover novel KRAS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

**Assay Data****Tris-Bis PAGE**

Human HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Tetramer on Tris-Bis PAGE under Non reducing (N) condition. The purity is greater than 95%.

**SEC-HPLC**

## Assay Data

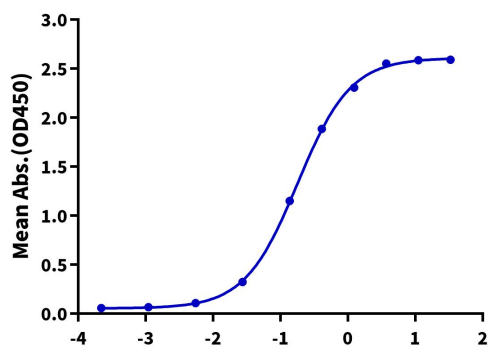


The purity of Human HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Tetramer is greater than 95% as determined by SEC-HPLC.

## ELISA Data

## Human KRAS G12V (HLA-A\*03:01) Tetramer, His Tag ELISA

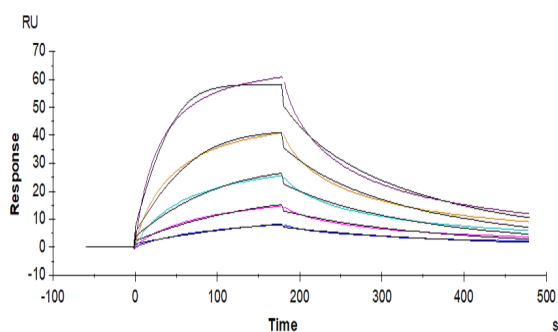
0.5µg Human KRAS G12V (HLA-A\*03:01) Tetramer, His Tag Per Well



Log Anti-KRAS G12V (HLA-A\*03:01) Antibody, hFc Tag Conc.(µg/ml)

Immobilized Human HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Tetramer, His Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Antibody, hFc Tag with the EC50 of 0.18µg/ml determined by ELISA (QC Test).

## SPR Data



Anti-HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Antibody captured on CM5 Chip via Protein A can bind Human HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Tetramer, His Tag with an affinity constant of 42.3 nM as determined in SPR assay (Biacore T200).