

Human HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Monomer Protein



Cat. No. MHC-HM418

| Description      |   |
|------------------|---|
| Source           | Recombinant Human HLA-A*03:01&B2M&KRAS G12V (VVVGAVGVGK) Monomer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus.<br>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 50.2 kDa. Due to glycosylation, the protein migrates to 55-60 kDa based on Bis-Tris PAGE result.  |
| Endotoxin        | Less than 1 EU per ug by the LAL method.  |
| Purity           | > 95% as determined by Bis-Tris PAGE<br>> 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          | Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.   |
| Storage                 | -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

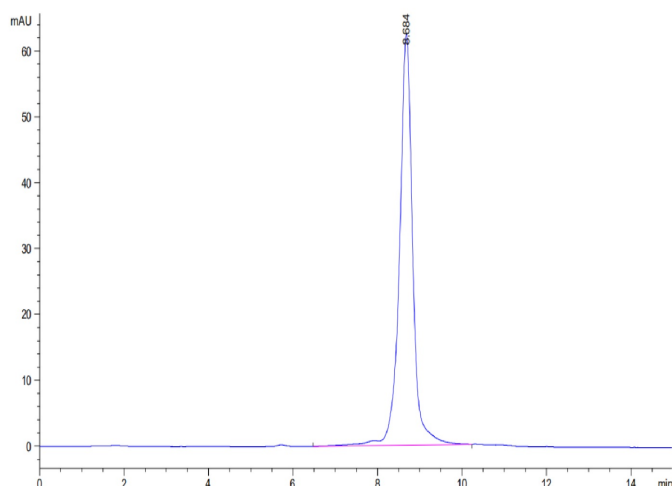
Bis-Tris PAGE



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

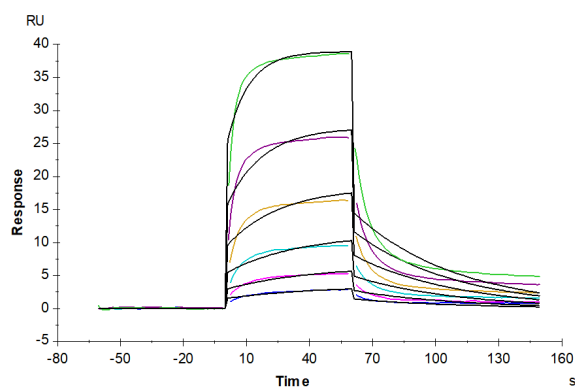
SEC-HPLC

## Assay Data



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

## SPR Data



Human HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Monomer, His Tag captured on CM5 Chip via anti-his antibody can bind Anti-HLA-A\*03:01&B2M&KRAS G12V (VVVGAVGVGK) Antibody with an affinity constant of 0.11  $\mu\text{M}$  as determined in SPR assay (Biacore T200).