

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. 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 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

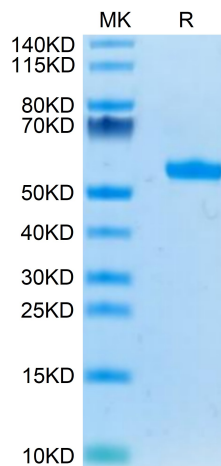
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled 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

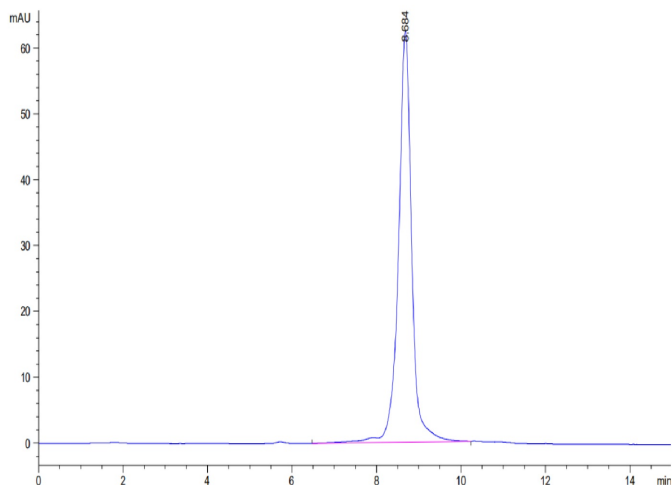
Tris-Bis PAGE



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

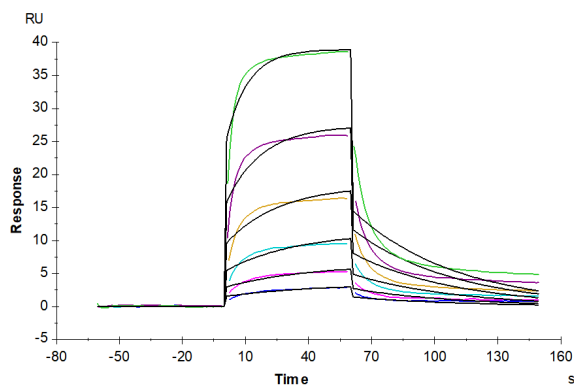
SEC-HPLC

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 μ M as determined in SPR assay (Biacore T200).