

Recombinant Human KRAS G12V (HLA-A*03:01) Complex Tetramer Protein

Catalog No.: RP02684 Recombinant

Sequence Information

Species Gene ID HEK293 cells 3105 & 567

NP_002107. 3(HLA-A*03:01)&P6 1769(B2M)& VVGAVGVG

Swiss Prot

Tags

C-His&Avi

Synonyms

MHC; KRAS; K-Ras 2; KRAS2; C-K-RAS; CFC2; K-RAS2A; K-RAS2B; K-RAS4A; K-RAS4B; KRAS1; KRAS2; NS; NS3; RASK2; GTPase Kras; KI-RAS; RALD

Product Information

Source

Purification

HEK293 cells

> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC

Endotoxin

Less than 1EU per μg by the LAL method.

Formulation

Reconstitution

Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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.

Basic Information

Description

Recombinant Human KRAS G12V (HLA-A*03:01) Complex Tetramer Protein is expressed from Expi293 with His tag and Avi tag at the C-terminal, tetramer is assembled by biotinylated monomer and streptavidin. ; It contains Gly25-Thr305(HLA-A*03:01),Ile21-Met119(B2M) and VVVGAVGVGK peptide.

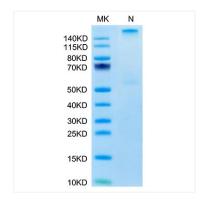
Bio-Activity

Storage

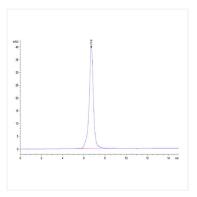
Store at -20° C. Store the lyophilized protein at -20° C to -80° C up to 1 year from the date of receipt.

 After reconstitution, the protein solution is stable at -20° C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

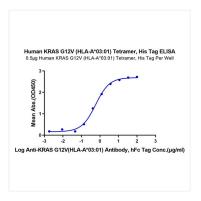
Validation Data



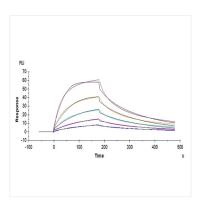
Human KRAS G12V (HLA-A*03:01) Tetramer on Tris-Bis PAGE under Non reducing (N) condition. The purity is greater than 95%.



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



Immobilized Human KRAS G12V (HLA-A*03:01) Tetramer, His Tag at $5\mu g/ml$ (100 $\mu l/Well$) on the plate. Dose response curve for Anti-KRAS G12V (HLA-A*03:01) Antibody, hFc Tag with the EC₅₀ of 0.58 $\mu g/ml$ determined by ELISA.



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