Alexa Fluor™ 647-Labeled Human HLA-A*11:01&B2M&KRAS (VVGAGGVGK) Complex Protein (Monomer)

Catalog # HLS-HA2H9

Synonym

HLA-A*1101 | B2M | KRAS (VVGAGGVGK)

Source

Alexa Fluor 647-Labeled Human HLA-A*11:01&B2M&KRAS (VVGAGGVGK) Complex Protein(HLS-HA2H9) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Thr 305 (HLA-A*11:01) & Ile 21 - Met 119 (B2M) & VVGAGGVGK peptide (Accession # Q5S3G3-1 (HLA-A*11:01) & P61769 (B2M) & VVGAGGVGK).
Predicted N-terminus: Gly 25 & Ile 21

Molecular Characterization

Alexa Fluor 647-Labeled Human HLA-A*11:01&B2M&KRAS (VVGAGGVGK) Complex Protein is produced by co-expression of HLA and B2M loaded with KRAS peptide.

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 36.4 kDa and 14.0 kDa. The protein migrates as 55-66 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

AF647

Excitation Wavelength: 640 nm

Emission Wavelength: 672 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with AF647 using standard chemical labeling method. The residual AF647 is removed by molecular sieve treatment during purification process.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

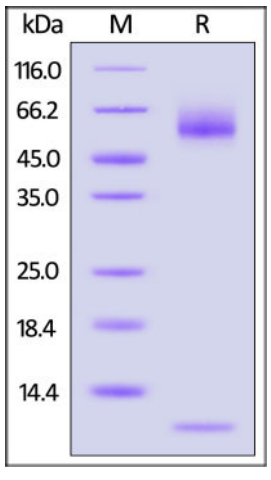
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Alexa Fluor 647-Labeled Human HLA-A*11:01&B2M&KRAS (VVGAGGVGK) Complex Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Background

The Kirsten rat sarcoma 2 viral oncogene homolog (KRAS) oncogene plays a critical role in the initiation and maintenance of pancreatic tumors and its signaling network represents a major target for therapeutic intervention. The Biotinylated Human HLA-A*1101 KRAS (VVGAGGVGK) complex protein is a complex of HLA-A*1101 of the MHC Class I, B2M, and VVGAGGVGK peptide of the KRAS.

Clinical and Translational Updates