

Biotinylated Human HLA-C\*07:02:01&B2M&RYP (RYPRTVAL) Complex Protein (Monomer)

Catalog # HLR-H52W2



Synonym

HLA-C\*07:02:01 & B2M & RYP

Source

Biotinylated Human HLA-C\*07:02:01&B2M&RYP (RYPRTVAL) Complex Protein (HLR-H52W2) is expressed from human 293 cells (HEK293). It contains AA Cys 25 - Ile 308 (HLA-C\*07:02:01) & Ile 21 - Met 119 (B2M) peptide (Accession # [P10321](#) (HLA-C\*07:02:01) & [P61769](#) (B2M)). Predicted N-terminus: Cys 25 & Arg

Molecular Characterization

Biotinylated Human HLA-C\*07:02:01&B2M&RYP (RYPRTVAL) Complex Protein is produced by co-expression of HLA and B2M loaded with RYP peptide.

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 36.1 kDa and 13.8 kDa. The protein migrates as 42-45 kDa and 14 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% 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

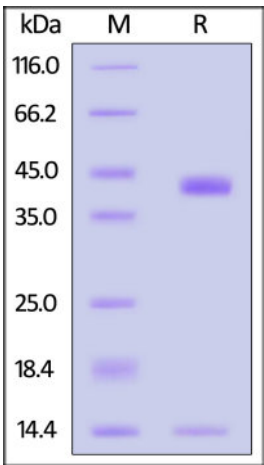
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please 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



Biotinylated Human HLA-C\*07:02:01&B2M&RYP (RYPRTVAL) Complex Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

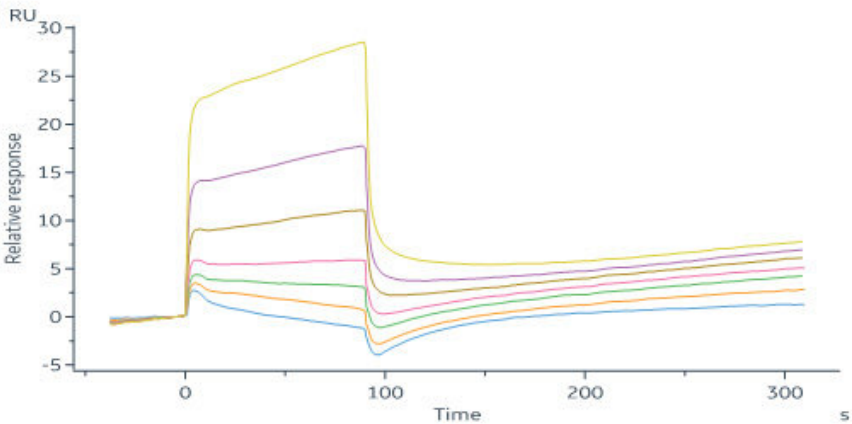
Bioactivity-SPR

Discounts, Gifts,  
and more!

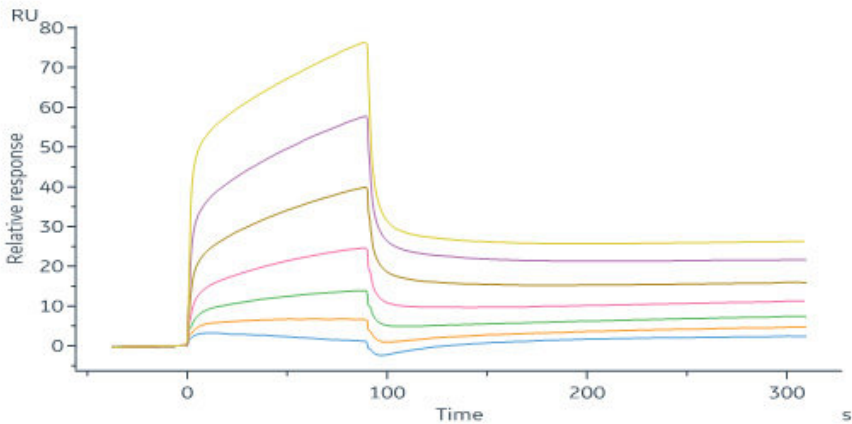


Biotinylated Human HLA-C\*07:02:01&B2M&RYP (RYPGTVAL) Complex Protein (Monomer)

Catalog # HLR-H52W2



Biotinylated Human HLA-C\*07:02:01&B2M&RYP (RYPGTVAL) Complex Protein (Monomer) (Cat. No. HLR-H52W2) immobilized on SA Chip can bind Human KIR2DL3, Fc Tag (Cat. No. KI3-H5258) with an affinity constant of 2.40  $\mu$ M as determined in a SPR assay (Biacore 8K) (Routinely tested).



Biotinylated Human HLA-C\*07:02:01&B2M&RYP (RYPGTVAL) Complex Protein (Monomer) (Cat. No. HLR-H52W2) immobilized on SA Chip can bind Human KIR2DL2, Fc Tag (Cat. No. KI2-H5255) with an affinity constant of 1.01  $\mu$ M as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

HLA-A, B, and C are transmembrane glycoproteins in the major histocompatibility complex 1 (MHC I) family. The C receptor is a heterodimer consisting of a HLA-C mature gene product (heavy chain) and  $\beta$ 2-microglobulin (light chain). The mature C chain is anchored in the membrane. HLA class I molecules play a central role in the immune system by presenting peptides derived from endoplasmic reticulum lumen. HLA-C are expressed in nearly all cells, and present small peptides to the immune system which surveys for non-self peptides. Biotinylated Human HLA-C\*07:02:01&B2M&RYP (RYPGTVAL) Complex Protein is a complex of HLA-C\*07:02:01 of the MHC Class I, B2M and RMFPNAPYL peptide of the RYP.

Clinical and Translational Updates

