Unconjugated Human HLA-A*33:03&B2M&EGF R (HVKITDFGR) Complex Protein (Monomer, MALS verified)

Catalog # HLR-H82Ef

Synonym

HLA-A*3303 & B2M & EGF R (HVKITDFGR)

Source

Unconjugated Human HLA-A*33:03&B2M&EGF R (HVKITDFGR) Complex Protein (HLR-H82Ef) is expressed from human 293 cells (HEK293).
It contains AA Gly 25 - Ile 308 (HLA-A*33:03) & Ile 21 - Met 119 (B2M) & HVKITDFGR peptide (Accession # AAA79865.1 (HLA-A*33:03) & P61769-1 (B2M) & HVKITDFGR).
Predicted N-terminus: Gly 25 & His

Molecular Characterization

Unconjugated Human HLA-A*33:03&B2M&EGF R (HVKITDFGR) Complex Protein is produced by co-expression of HLA-A*33:03 and B2M loaded with EGF R peptide.
This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™), and it is not biotinylated.
The protein has a calculated MW of 36.2 kDa and 13.8 kDa. The protein migrates as 40-43 kDa and 12 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Purity

>90% as determined by SDS-PAGE.
>90% as determined by SEC-MALS.

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

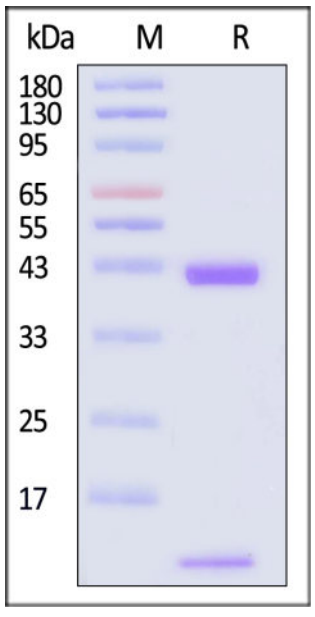
For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

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

ACRO Quality Management System

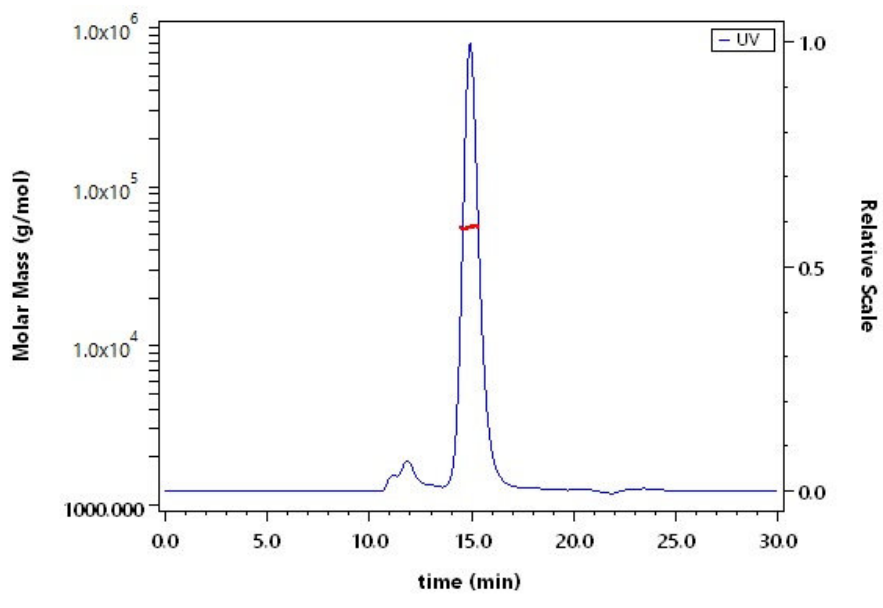
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



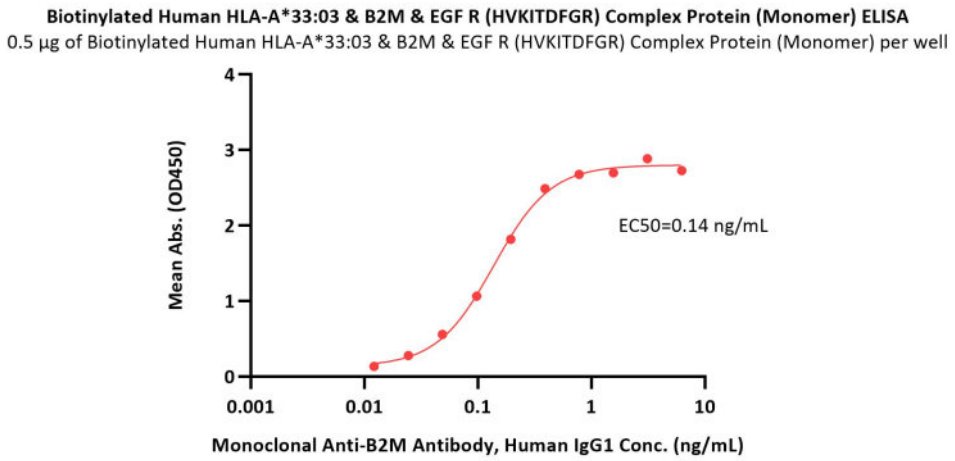
Unconjugated Human HLA-A*33:03&B2M&EGF R (HVKITDFGR) Complex Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Unconjugated Human HLA-A*33:03&B2M&EGF R (HVKITDFGR) Complex Protein (Cat. No. HLR-H82Ef) is more than 90% and the molecular weight of this protein is around 45-65 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Biotinylated Human HLA-A*33:03 & B2M & EGF R (HVKITDFGR) Complex Protein (Monomer) (Cat. No. HLR-H82Ef) at 5 μg/mL (100 μL/well) can bind Monoclonal Anti-B2M Antibody, Human IgG1 with a linear range of 0.01-1 ng/mL (QC tested).

Background

The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is the cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. The epidermal growth factor receptor is a member of the ErbB family of receptors, a subfamily of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). Mutations affecting EGFR expression or activity could result in cancer. The Human HLA-A*3303 & B2M & EGF R(HVKITDFGR) protein is a complex of HLA-A*3303 of the MHC Class I, B2M, and HVKITDFGR peptide of the EGF R.