

Human HLA-A*02:01&B2M&P53 R175H (HMTEVVRHC) Monomer Protein

Cat. No. MHC-HE011

Description

Source	Recombinant Human HLA-A*02:01&B2M&P53 R175H (HMTEVVRHC) Monomer Protein is expressed from E.coli with His tag and Avi tag at the C-terminus. It contains Gly25-Thr305 (HLA-A*02:01), Ile21-Met119 (B2M) and HMTEVVRHC peptide.
Accession	A0A140T913(HLA-A*02:01)&P61769(B2M)&HMTEVVRHC
Molecular Weight	The protein has a predicted MW of 35.6 kDa (HLA-A*02:01) and 11.9 kDa (B2M) same as Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

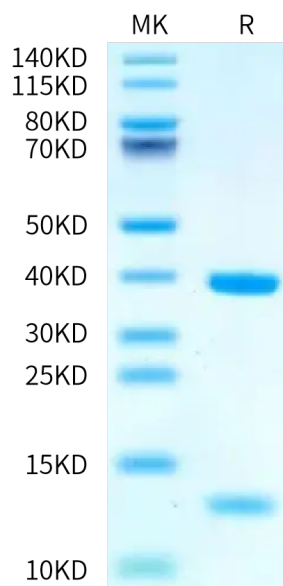
Formulation	Supplied as 0.22 µm filtered solution in 20mM Tris, 200mM NaCl (pH 8.0).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

p53 is a tumor suppressor protein. Under stressful conditions, p53 tightly regulates cell growth by promoting apoptosis and DNA repair. When p53 becomes mutated, it loses its function, resulting in abnormal cell proliferation and tumor progression. Depending on the p53 mutation, it has been shown to form aggregates leading to negative gain of function of the protein. p53 mutant associated aggregation has been observed in several cancer tissues and has been shown to promote tumor growth.

Assay Data

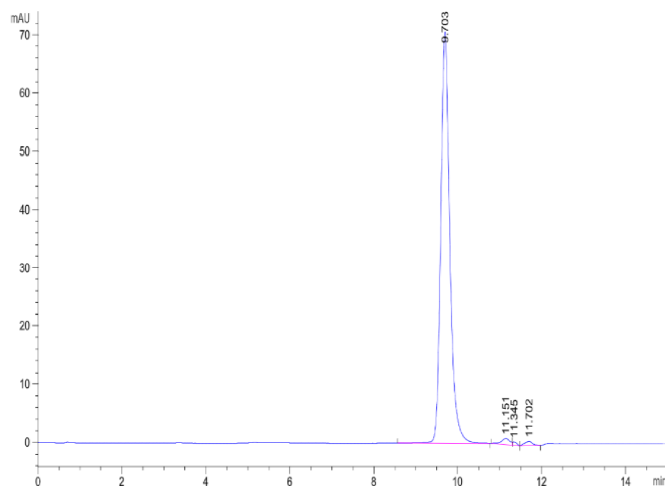
Bis-Tris PAGE



Human HLA-A*02:01&B2M&P53 R175H (HMTEVVRHC) Monomer on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

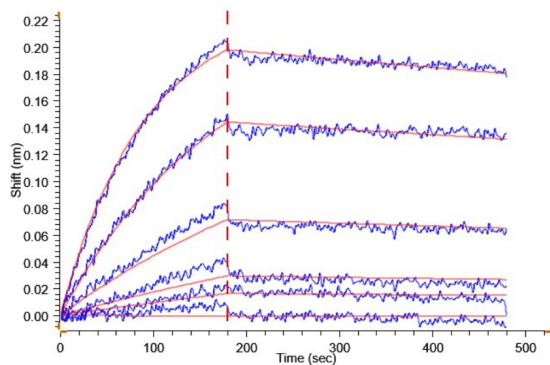
SEC-HPLC

Assay Data



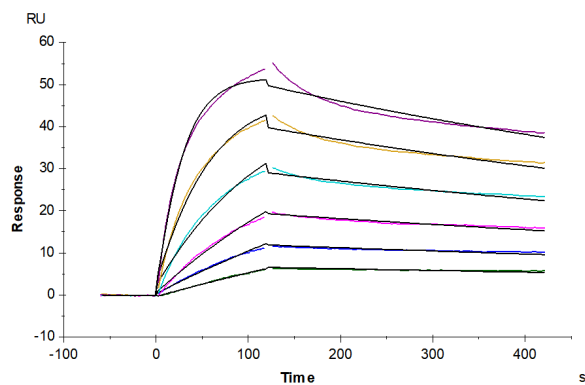
The purity of Human HLA-A*02:01&B2M&P53 R175H (HMTEVVRHC) Monomer is greater than 95% as determined by SEC-HPLC.

BLI Data



Loaded Human HLA-A*02:01&B2M&P53 R175H (HMTEVVRHC) Monomer on Anti-His-Biosensor can bind Anti-HLA-A*02:01&B2M&P53 R175H (HMTEVVRHC) Antibody, hFc Tag with an affinity constant of 1.43 nM as determined in BLI assay .

SPR Data



Human HLA-A*02:01&B2M&P53 R175H (HMTEVVRHC) Monomer, His Tag captured on CM5 Chip via Anti-His Antibody can bind Anti-HLA-A*02:01&B2M&P53 R175H (HMTEVVRHC) Antibody, hFc Tag with an affinity constant of 2.35 nM as determined in SPR assay (Biacore T200).