

Rev03
 Update: Aug,08,2025

DATASHEET

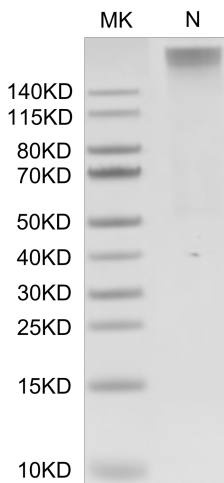
HLA-A*02:01&B2M&LMP2 (CLGGLTMV) Tetramer, His & Avi, Human

Cat. No.: Z06569

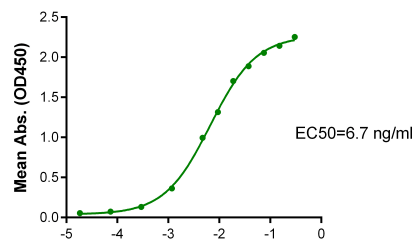
Product Introduction

Species	Human
Protein Construction	<div style="display: flex; align-items: center; justify-content: space-between;"> <div style="background-color: #0056b3; color: white; padding: 5px;"> HLA-A*02:01&B2M&LMP2 (CLGGLTMV) Tetramer [Gly25-Thr305 (HLA-A*02:01), Ile21-Met119 (B2M) and CLGGLTMV peptide] Accession # A0A140T913(HLA-A*02:01)&P61769(B2M)&CLGGLTMV </div> <div style="background-color: #90c090; padding: 5px;">His</div> <div style="background-color: #508050; color: white; padding: 5px;">Avi</div> </div> <p style="text-align: center; margin-top: 5px;">N-term C-term</p>
Purity	> 95% as determined by BisTris PAGE > 95% as determined by HPLC
Endotoxin Level	Less than 1EU per µg by the LAL method.
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized HLA-A*02:01&B2M&LMP2 (CLGGLTMV) Tetramer, His & Avi, Human at 1µg/ml (100µl/Well) on the plate can bind AntiHLAA*02:01&B2M&LMP2 (CLGGLTMV) Antibody, hFc Tag. Test result was comparable to standard batch.
Expression System	HEK293
Theoretical Molecular Weight	258 kDa
Apparent Molecular Weight	Due to glycosylation, the protein migrates to 260-265 kDa under Non reducing (N) condition based on Bis-Tris PAGE result.
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4).
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage & Stability	Upon receiving, the product remains stable up to 6 months at -20 °C or below. Upon reconstitution, the product should be stable for 3 months at -80 °C. Avoid repeated freeze-thaw cycles.

Examples

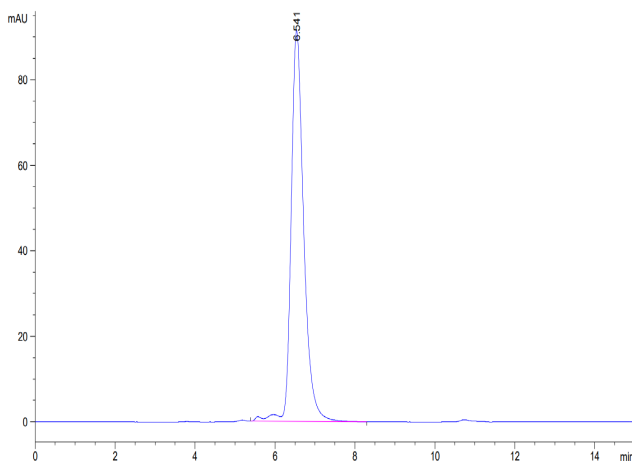


HLA-A*02:01&B2M&LMP2 (CLGGLTMV) Tetramer, His & Avi, Human on Bis-Tris PAGE under Non reducing (N) condition. The purity is greater than 95%.



Log Anti-HLA-A*02:01&B2M&LMP2 (CLGGLTMV) Antibody, hFc Tag Conc. (µg/ml)

Immobilized HLA-A*02:01&B2M&LMP2 (CLGGLTMV) Tetramer, His & Avi, Human, His Tag at 1 µg/ml (100 µl/well) on the plate. Dose response curve for Anti-HLA-A*02:01&B2M&LMP2 (CLGGLTMV) Antibody, hFc Tag with the EC₅₀ of 6.7 ng/ml determined by ELISA.



The purity of HLA-A*02:01&B2M&LMP2 (CLGGLTMV) Tetramer, His & Avi, Human was greater than 95% as determined by SEC-HPLC.

Background

Target Background : The immunoproteasome, having been linked to neurodegenerative diseases and hematological cancers, has been shown to play an important role in MHC class I antigen presentation. The development of molecular probes that selectively inhibit the major catalytic subunit, LMP2, of the immunoproteasome, LMP2-rich cancer cells compared to LMP2-deficient cancer cells are more sensitive to growth inhibition by the LMP2-specific inhibitor, implicating an important role of LMP2 in regulating cell growth of malignant tumors that highly express LMP2.

Synonyms : MHC; RMF; LMP2; LMP-2; Macropain chain 7; Proteasome chain 7; PSMB9; RING12

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