

# Recombinant Human LMP2 (HLA-A\*02:01) Complex Tetramer Protein

Catalog No.: RP02687 Recombinant

# **Sequence Information**

Species Gene ID Swiss Prot HEK293 cells A0A140T913 (HLA-

A\*02:01)&P6 1769(B2M)& CLGGLLTMV

#### **Tags** C-His&Avi

# Synonyms

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

#### **Product Information**

# **Source** Purification HEK293 cells ≥ 95 % as

≥ 95 % as determined by Tris-Bis PAGE;≥ 95 % as determined by HPLC.

#### **Endotoxin**

< 1 EU/ $\mu$ g of the protein by LAL method.

#### **Formulation**

#### Reconstitution

Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

### **Contact**

www.abclonal.com

# **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.

#### **Basic Information**

#### Description

Recombinant Human LMP2 (HLA-A\*02:01) Complex Tetramer Protein is expressed from Expi293 with His tag and Avi tag at the C-terminal, tetramer is assembled by biotinylated monomer and streptavidin.; It contains Gly25-Thr305(HLA-A\*02:01), Ile21-Met119(B2M) and CLGGLLTMV peptide.

#### **Bio-Activity**

#### Storage

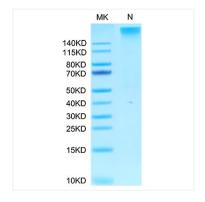
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

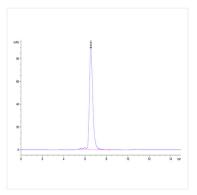
Avoid repeated freeze/thaw cycles.

<sup>\*</sup> For your safety and health, please wear a lab coat and disposable gloves when handling.

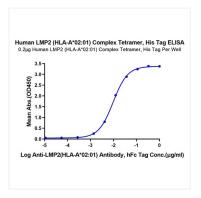
# **Validation Data**



Recombinant Human LMP2 (HLA-A\*02:01) Complex Tetramer Protein was determined by Tris-Bis PAGE under non-reducing (NR) conditions.



The purity of Human LMP2 (HLA-A\*02:01) Tetramer was greater than 95% as determined by SEC-HPLC.



Immobilized Human LMP2 (HLA-A\*02:01) Tetramer, His Tag at  $2\mu g/ml$  ( $100\mu I/Well$ ) on the plate. Dose response curve for Anti-LMP2 (HLA-A\*02:01) Antibody, hFc Tag with the EC<sub>50</sub> of 9.6ng/ml determined by ELISA.