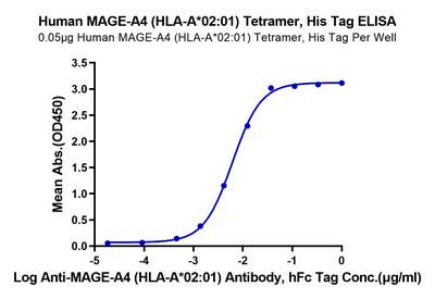
HuPro®

HLA-A/B2M/MAGEA4 Tetramer (Human) Recombinant Protein

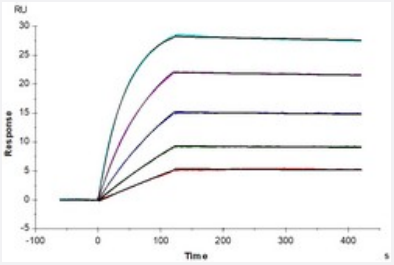
Catalog # P9774 Size 100 ug

Applications



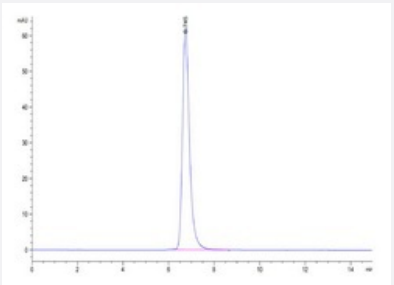
Enzyme-linked Immunoabsorbent Assay

Immobilized Human HLA-A*02:01 & B2M & MAGE-A4 (GVYDGREHTV) Tetramer, His Tag at 0.5 ug/mL (100 uL/Well) on the plate. Dose response curve for Anti-HLA-A*02:01 & B2M & MAGE-A4 (GVYDGREHTV) Antibody, hFc Tag with the EC50 of 6.1 ng/mL determined by ELISA (QC Test).



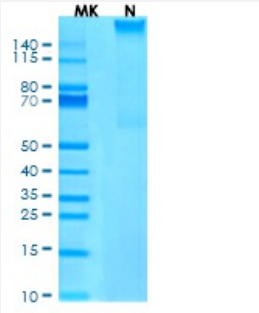
Surface Plasmon Resonance

Anti-HLA-A*02:01 & B2M & MAGE-A4 (GVYDGREHTV) Antibody, hFc Tag captured on CM5 Chip via Protein A can bind Human HLA-A*02:01 & B2M & MAGE-A4 (GVYDGREHTV) Tetramer, His Tag with an affinity constant of 8.49 pM as determined in SPR assay (Biacore T200).



SEC-HPLC

The purity of Human HLA-A*02:01&B2M&MAGE-A4 (GVYDGREHTV) Tetramer is greater than 95% as determined by SEC-HPLC.



Tris-Bis PAGE

Human HLA-A*02:01&B2M&MAGE-A4 (GVYDGREHTV) Tetramer on Tris-Bis PAGE under Non reducing (N) condition. The purity is greater than 95%.

Specification

Product Description	Human HLA-A | B2M | MAGEA4 Tetramer (A0A140T913|P61769|P43358, Gly25-Thr305 | Ile21-Met 119 | GVYDGREHTV) partial recombinant protein with His-Avi tag at C-terminus expressed in HEK2 93 cells.
Sequence	Gly25-Thr305 | Ile21-Met119 | GVYDGREHTV
Host	Human
Theoretical MW (kDa)	258
Form	Lyophilized
Preparation Method	Mammalian cell (HEK293) expression system
Quality Control Testing	SEC-HPLC and Tris-Bis PAGE SEC-HPLC The purity of Human HLA-A*02:01&B2M&MAGE-A4 (GVYDGREHTV) Tetramer is greater than 95% as determined by SEC-HPLC. Tris-Bis PAGE Human HLA-A*02:01&B2M&MAGE-A4 (GVYDGREHTV) Tetramer on Tris-Bis PAGE under Non re ducing (N) condition. The purity is greater than 95%.
Recommend Usage	Biological Activity ELISA SPR SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from sterile distilled Water is > 100 ug/mL
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of bioactivity analysis

Applications

- Enzyme-linked Immunoabsorbent Assay

  Immobilized Human HLA-A*02:01 & B2M & MAGE-A4 (GVYDGREHTV) Tetramer, His Tag at 0.5 ug/mL (100 uL/Well) on the plate. Dose response curve for Anti-HLA-A*02:01 & B2M & MAGE-A4 (GVYDGREHTV) Antibody, hFc Tag with the EC50 of 6.1 ng/mL determined by ELISA (QC Test).

- Functional Study

- SDS-PAGE

- Surface Plasmon Resonance

  Anti-HLA-A*02:01 & B2M & MAGE-A4 (GVYDGREHTV) Antibody, hFc Tag captured on CM5 Chip via Protein A can bind Human HLA-A*02:01 & B2M & MAGE-A4 (GVYDGREHTV) Tetramer, His Tag with an affinity constant of 8.49 pM as determined in SPR assay (Biacore T200).

Gene Info — B2M

Entrez GeneID	567
Protein Accession#	A0A140T913(HLA-A*02:01) | P61769(B2M) | GVYDGREHTV
Gene Name	B2M
Gene Alias	-
Gene Description	beta-2-microglobulin
Omim ID	109700 241600
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a serum protein found in association with the major histocompatibility comple x (MHC) class I heavy chain on the surface of nearly all nucleated cells. The protein has a predomi nantly beta-pleated sheet structure that can form amyloid fibrils in some pathological conditions. A mutation in this gene has been shown to result in hypercatabolic hypoproteinemia
Other Designations	beta chain of MHC class I molecules|beta-2-microglobin

Gene Info — MAGEA4

Entrez GeneID	4103
Protein Accession#	A0A140T913(HLA-A*02:01) | P61769(B2M) | GVYDGREHTV
Gene Name	MAGEA4

Gene Alias	MAGE-41, MAGE-X2, MAGE4, MAGE4A, MAGE4B, MGC21336
Gene Description	melanoma antigen family A, 4
Omim ID	300175
Gene Ontology	Hyperlink
Gene Summary	This gene is a member of the MAGEA gene family. The members of this family encode proteins with 50 to 80% sequence identity to each other. The promoters and first exons of the MAGEA genes show considerable variability, suggesting that the existence of this gene family enables the same function to be expressed under different transcriptional controls. The MAGEA genes are clustered at chromosomal location Xq28. They have been implicated in some hereditary disorders, such as dyskeratosis congenita. At least four variants encoding the same protein have been found for this gene. [provided by RefSeq
Other Designations	OTTHUMP00000025889|OTTHUMP00000025890|melanoma-associated antigen 4

Pathway

- Antigen processing and presentation

Disease

- Arthritis
- Cardiovascular Diseases
- Diabetes Mellitus
- Disease
- Edema
- Gastritis
- Genetic Predisposition to Disease
- Kidney Failure
- Osteoarthritis
- Parkinson disease
- Stomach Neoplasms