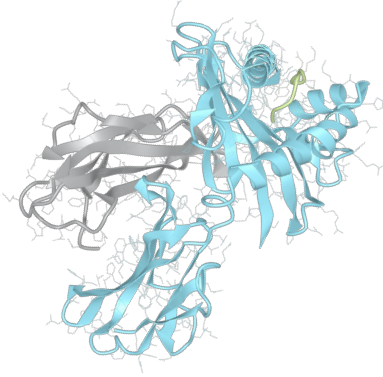


Quality Assurance Datasheet



sHLA-A*02:01bio/pep

A*0201, A0201, A*02, A02, A2

CMV

NLVPMVATV

Serological Name	A2
Peptide Load	Specific Peptide
Complexity	Monomer
Conjugation	Biotin

SKU	A0201biopep
LOT#	HLAbioPep004-Bio12301-P397R

Product Description

Allele Name	A*02:01 B2m
HLA Class	HLA Class I
HLA Gene Locus	HLA-A
Alternative Allele Name A Chain	A*0201, A0201, A*02, A02, A2
Alternative Allele Name B Chain	-
Description	Biotinylated, recombinant, truncated Class I soluble Human Leukocyte Antigen (sHLA), naturally folded and glycosylated, loaded with synthetic peptide.
Serological Name	A2
Serological Split	-
Bw4/Bw6 Assignment	-
Bw4/Bw6 Sequence	-
Allele Frequency [World Population]	
A chain	12.00%
B chain	-

Associated products

[A0201biopep](#)
[A0201Tetrpep](#)

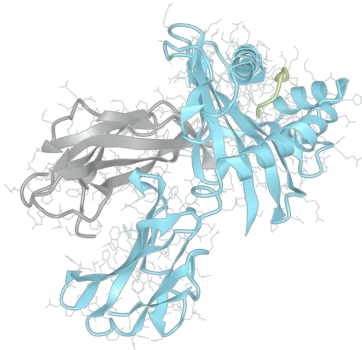
Product Specification

Product Definition	HLA-A*02:01bio/pep
Product Name	A*02:01bio/CMV
Lot	HLAbioPep004-Bio12301-P397R
Peptide Name	CMV
Peptide sequence	NLVPMVATV
HLA Species	Human
Host Cell Line Species	Human
Peptide Load	Specific Peptide
Modification	Modified
Conjugation	Biotin
Complexity	Monomer
Protein Format	Biotinylated, recombinant, truncated, soluble, modified, synthetic peptide loaded
Storage Temperature	4 °C (This product should be stored undiluted)
Form	Liquid
Concentration	617.3 µg/ml
Formulation	PBS
pH	7.4
Purification Method	Affinity Chromatography/Spin Filtration
Grade	Research Use Only [RUO]
Authentication Verification	Sequence Based Typing

Protein Sequences

Alpha Chain Sequence	<p> GSHSMRYFFT SVSRPGRGEP RFIAVGYVDD TQFVRFSDA ASQRMEPRAP WIEQEGPEYW DGETRKVKAH SQTHRVDLGT LRGYYNQSEA GSHTVQRMYG CDVGSDDRFL RGYHQYAYDG KDYIALKEDL RSWTAADMAA QTTKHKWEAA HVAEQLRAYL EGTVCVEWLR R YLENGKETLQ RTDAPKTHMT HHAUSDHEAT LRCWALSFYP AEITLTWQRD GEDQTQDTEL VETRPAGDGT FQKWAAVVVP SGQEQRVYTC VQHEGLPKPL TLRWSVVSTD DDLA </p>
Beta Chain Sequence	<p> IQRTPKIQVY SRHPAENGKS NFLNCYVSGF HPSDIEVDLL KNGERIEKVE HSDLFSKDW SFYLLYYTEF TPTEKDEYAC RVNHVTLTSLQ KIVKWDRDM </p>

CERTIFICATE OF ANALYSIS



sHLA-A*02:01bio/pep

A*0201, A0201, A*02, A02, A2

CMV

NLVPMVATV

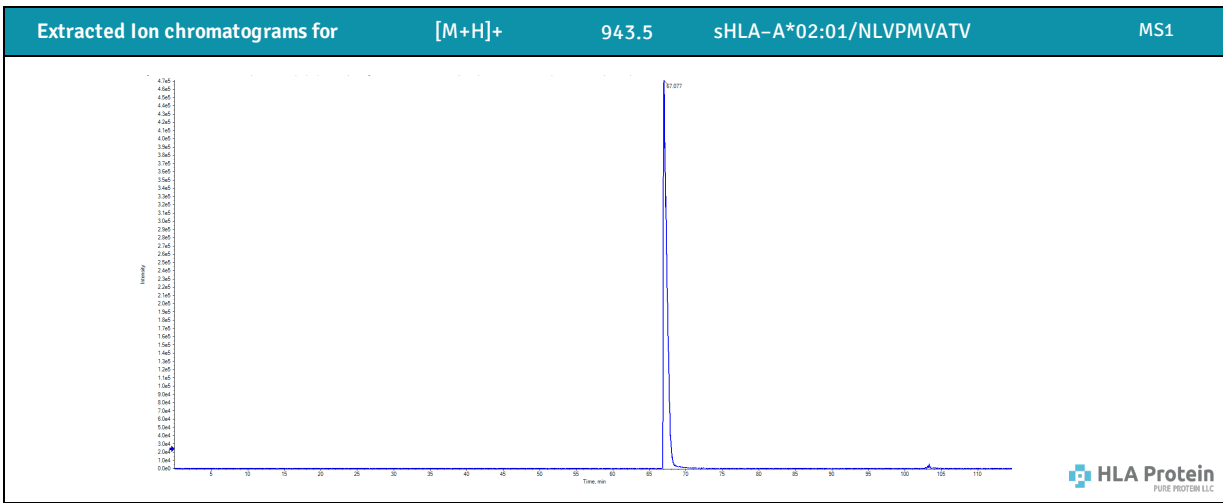
Serological Name	A2
Peptide Load	Specific Peptide
Complexity	Monomer
Conjugation	Biotin
SKU	A0201biopep
LOT#	HLAbioPep004-Bio12301-P397R

LCMS Mass-Spec Parameters

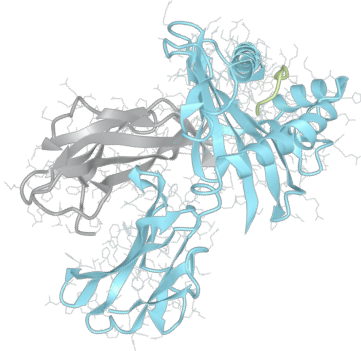
Product Name	sHLA-A*02:01bio/pep		
Test Lot#	HLAbioPep004-Bio12301-P397R		
Process	Purified HLA-A*02:01bio/pep monomer and controls were denatured with 10% acetic acid and incubated at 76° C for 10 minutes.		
HLA Amount Processed	18.1 µg		
Peptide Ligand Separation	C ₁₈ spin column		
Method of Analysis	nano-LCMS system		
Theoretical [M+2H]⁺⁺ Ion	943.5	CMV	NLVPMVATV

LCMS Mass-Spec Report

XIC AUC of MS1	1.558	1.E+07	<p>XIC = Extracted Ion Chromatogram AUC = Area Underneath the Curve BPC= Base Peak Chromatogram</p>
MS1 Peptide Dilution [x-fold]	100	x	
XIC AUC of MS2	3.293	1.E+06	
MS2 Peptide Dilution [x-fold]	1	x	
BPC MS1 [Custom Ion]	4.982	1.E+06	
BPC MS1 [Other Ions]	1.883	1.E+05	
Free peptide	0.211%		
Calculated Exchange Efficiency	96.2%	PASS/FAIL THRESHOLD: > 95%	Pass



CERTIFICATE OF ANALYSIS



sHLA-A*02:01pep

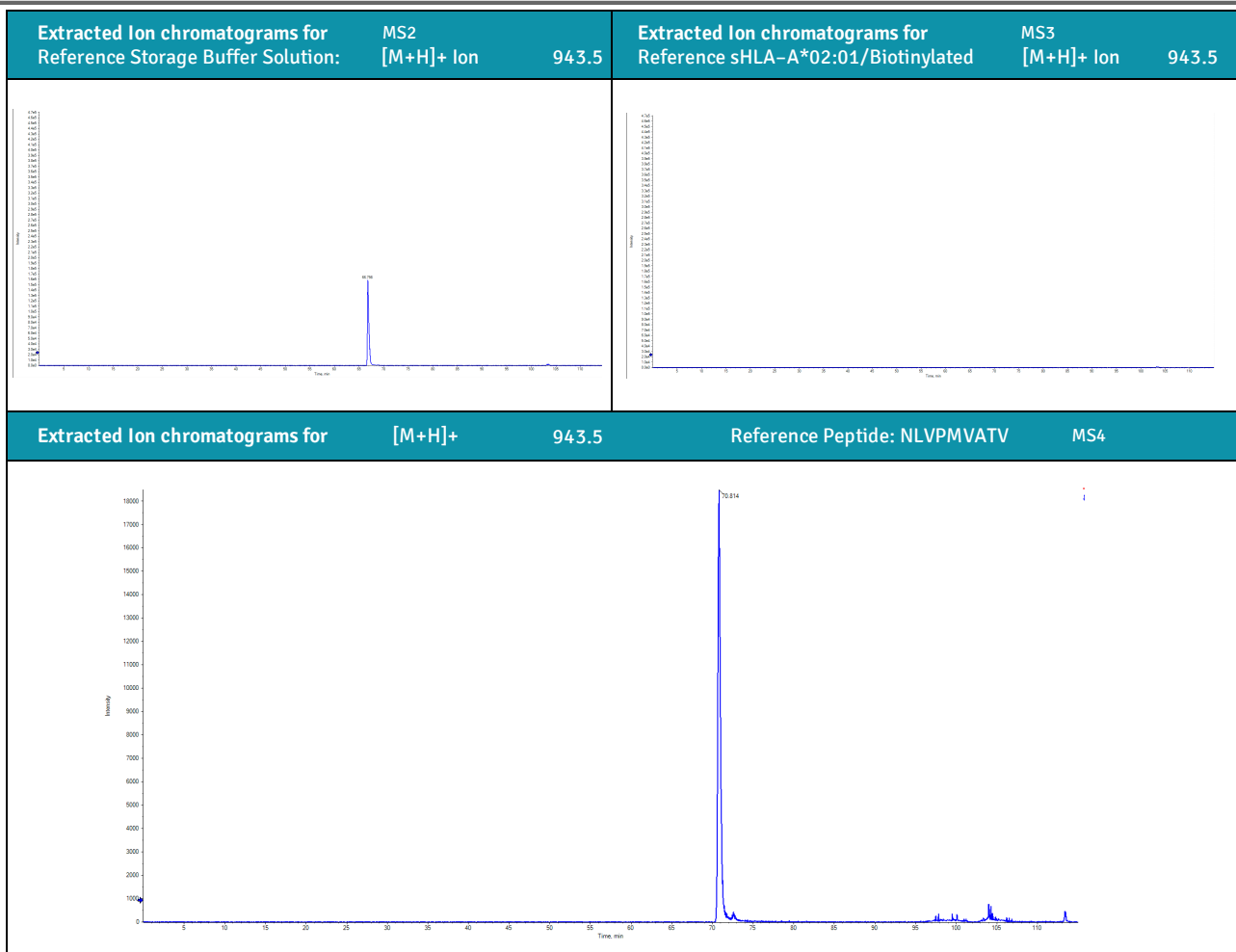
A*0201, A0201, A*02, A02, A2

CMV

NLVPMVATV

Serological Name	A2
Peptide Load	Specific Peptide
Complexity	Monomer
Conjugation	Biotin
SKU	A0201biopep
LOT#	HLAbioPep004-Bio12301-P397R

LCMS Mass-Spec Report



Disclaimer:

Oxidation of methionine (M), tryptophan (W) and cysteine (C) residues in peptides can occur and may be an artifact resulting from purification and handling steps.