

## CERTIFICATE OF ANALYSIS

## Product Information

Product Name:	Epithalon
Lot No.:	VI520251010-50
Sequence:	Ala-Glu-Asp-Gly
Modifications:	N/A

## Quality Control

Test Items	Specifications	Results
Appearance	White to off-white lyophilized powder	Conforms
Molecular Weight (MS)	390.35±1.0 Da	389.95 Da
Purity by HPLC	>98%	98.6%
Retention Time (HPLC)	±0.2min of Standard	Conforms
Net Peptide Content	≥50mg	55.7mg
Solubility	50 mg/1ml H2O	Clearly soluble
Acetic acid Content	≤8.0%	5.2%
TFA Content	≤0.500%	Conforms
DCM Content	≤0.060%	N.D.
DMF Content	≤0.088%	N.D.
Total Aerobic Count	≤100CFU/g	Conforms
Yeast & Molds Count	≤100CFU/g	Conforms
Endotoxins	≤0.5EU/mg	Conforms

Storage Conditions:	-20°C
Quality Control:	Mike P.
Date of Analysis:	October 2025

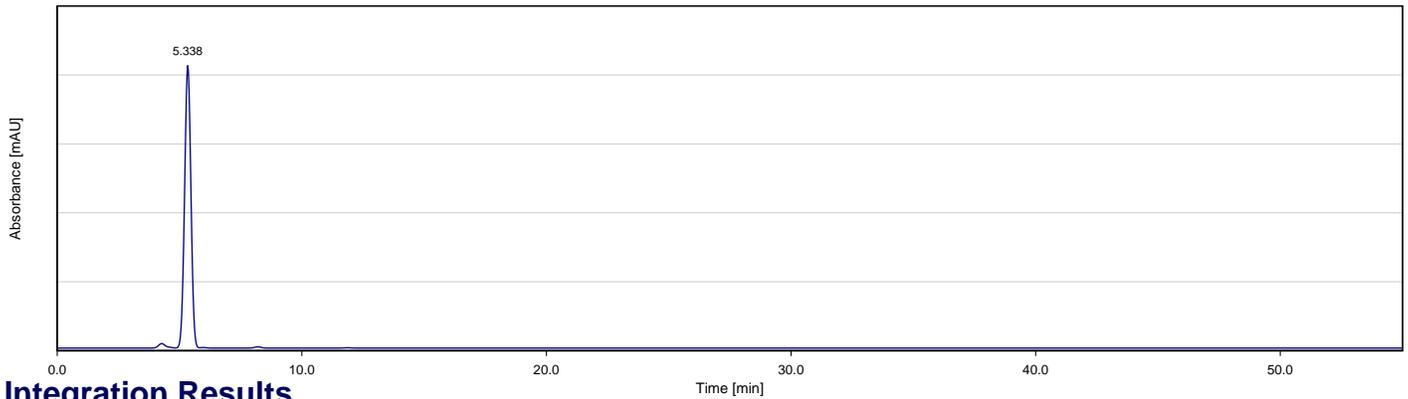
## Sample Information

Lot. No	VI520251010-50
Pump A	0.1% trifluoroacetic in 100% water
Pump B	0.1% trifluoroacetic in 100% acetonitrile
Total Flow	0.8ml/min
Wavelength	220nm
Analytical column type	Phenomenex Luna 3um C18 (2) (4.6*150mm*3um)
Dissolution method	100%H2O
Inj. Volume	20ul

## Gradient Program

Time	Module	Action	Value
0.01	Pumps	B.Conc	0
25.00	Pumps	B.Conc	20
30.00	Pumps	B.Conc	90
40.00	Pumps	B.Conc	90
41.00	Pumps	B.Conc	0
55.00	Controller	Stop	

## Chromatogram

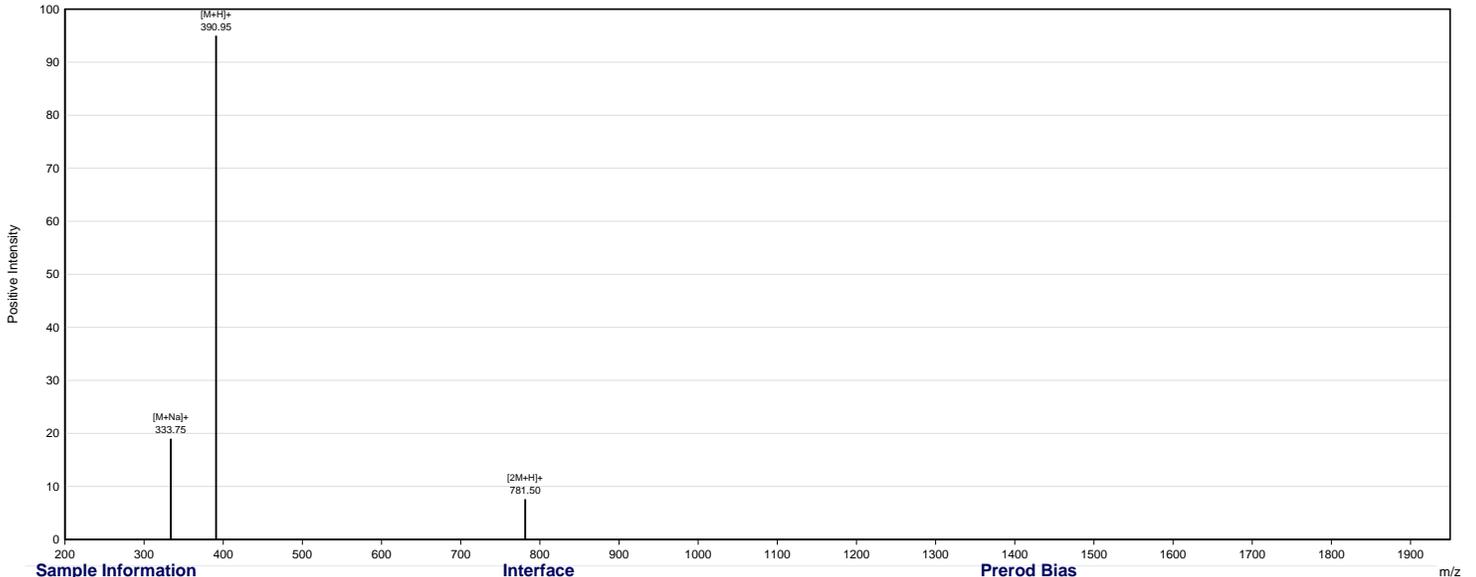


## Integration Results

No.	Ret. Time	Area	Height	Relative Area %	Amount
1	4.269	37789	6491	0.769	n.a.
2	4.572	9381	1127	0.191	n.a.
3	5.338	4842559	407657	98.553	n.a.
4	5.960	8181	740	0.167	n.a.
5	8.198	13750	1819	0.280	n.a.
6	11.865	2015	424	0.041	n.a.
<b>Total</b>		<b>4913675</b>	<b>418257</b>	<b>100.000</b>	<b>n.a.</b>

**Conclusion: Main peak at RT 5.338 min, purity 98.55% by area**

## MS Spectrum



### Sample Information

Dissolution method :3%**HAC**+25%**ACN**+72%**H2O**  
Injection Volume :1ul

### Interface

Interface :ESI  
Nebulizing Gas Flow :1.50L/min  
CDL Temp :250C  
CDL Volt :0v  
Block Temp :200

### Prerod Bias

Prerod Bias :+4.5kv  
Detector :-0.2kv  
T.Flow :0.2ml/min  
B. conc :30%**H2O**/70%**MeOH**

<b>Lot No.</b>	VI520251010-50
<b>Theoretical</b>	390.35
<b>Observed</b>	389.95