



Certificate of Analysis

Product Name	Thymulin		
CAS. NO.	63958-90-7	Batch No.	TP-250928
Molecular Formula	C ₃₃ H ₅₄ N ₁₂ O ₁₅	Molecular Weight	858.85
Mfg. Date	2025.09.28	Retest Date	2027.09.27
Report Date	2025.10.07	Quantity	664g
Sequence: Pyr-Ala-Lys-Ser-Gln-Gly-Gly-Ser-Asn-OH			
Items	Specification		Result
1	Appearance	White to off white powder	White powder
2	Solubility	Freely soluble in water	Conforms
3	Water Content (K.F)	≤7.0%	3.48%
4	Identity by MS	Theoretical MW:858.85	Conforms
5	Purity (by HPLC)	≥98.0%	99.23%
6	Related substance (by HPLC)	Total Impurities ≤2.0%	0.22%
		Largest single impurity ≤1.0%	0.13%
7	Bacterial Endotoxins	< 10 EUmg	Conforms
8	Assay		90.13%
Storage	Preserve in an air tight container, protected from light at a temperature of -25°C-15°C		
Conclusion	The product tested Conform with In-house standard		
Remark	It is only supplied as chemical product		

GOOD EAST PHARMA

QC:

Confirm:

Check:

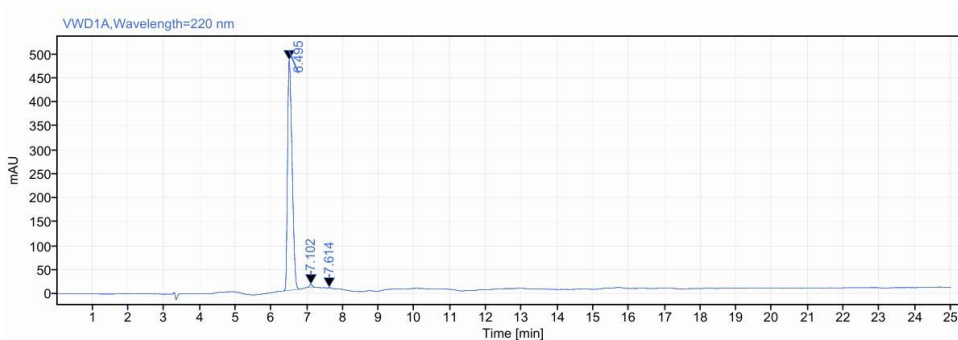
HPLC Chromatography

Single Injection Report



Data file: 2025-10-07 12-33-11+08-00-14.dx
Sequence Name: 20251007-1
Sample name: DZT-053
Instrument: Agilent1260
Inj. volume: 2.000
Acq. method: 2-27.amx
Processing method: GC_LC_DefaultMethod.pmx
Manually modified: Manual Integration

Project Name: A
Operator: System
Injection date: 2025-10-07 12:33:51+08:00
Location: P1-E2
Type: Sample
Sample amount: 0.00



Signal: VWD1A, Wavelength=220 nm

RT [min]	Type	Width [min]	Area	Height	Area%	Name
6.495	MM m	0.42	4245.15	480.75	99.23	
7.102	MM m	0.17	28.97	5.72	0.68	
7.614	MM m	0.11	3.99	1.12	0.09	
Sum			4278.11			