TEST REPORT

E-mail: lin@peptideformulationlab.com
Web： peptideformulationlab.com

Task Number #736285

Testing ordered > 03 Jun '26

Sample received > 08 Jun '26

Client	ShiLai™ Peptide Technologies
Sample	Retatrutide (15 mg)
Manufacturer	ShiLai™ Peptide Technologies
Batch	AR1636RT2

Sample description >

See picture or pictures attached.

Tests requested >

Assessment of a peptide cartridges.

Results >

Retatrutide	15.96mg
Assay (HPLC)	99.85%
Identity (MS)	Confirmed
Purity	99.85%
Related Impurities	≤0.8%
pH	5.8 ± 0.2
Endotoxin	<0.5 EU/mg
Sterility	Pass

Analysis conducted > 10 Sep 2026

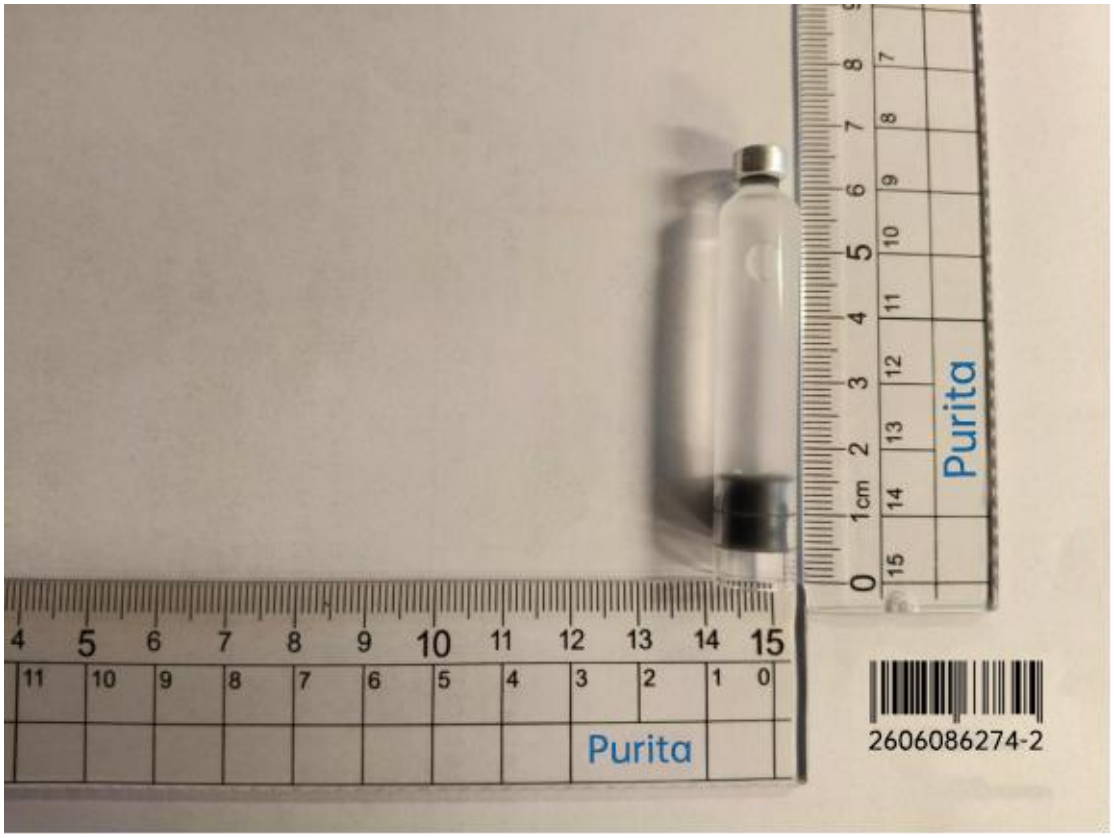
Signature >

Go to the website peptideformulationlab.com and contact the relevant person in charge to verify this test document.

27GX159372BT4

E-mail: lin@peptideformulationlab.com
Web： peptideformulationlab.com

The photo of sample：



TEST REPORT

E-mail: lin@peptideformulationlab.com
Web： peptideformulationlab.com

Retatrutide Injection Pen (illustrative laboratory data) - Stability by HPLC (15mg)

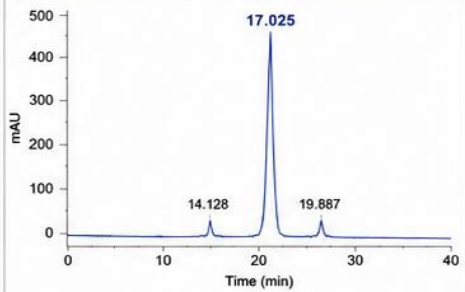
Product Name	:	Retatrutide Injection Pen (illustrative laboratory data) - (15mg)	**Sample Conc.**	:	5 mg/mL
Batch No.	:	AR1636RT2	**System**	:	Agilent 1260 Infinity II
Strength	:	15 mg / Pen	**Software**	:	OpenLAB CDS
Diluent	:	Bacteriostatic Water for Injection	**Run Time**	:	40 min
Column	:	Waters Xbridge BEH C18, 4.6 × 150 mm, 3.5 µm	**Wavelength**	:	220 nm
Mobile Phase	:	A: 0.1% TFA in Water B: 0.1% TFA in Acetonitrile	**Data Rate**	:	10 Hz
			Study Condition	:	Reconstituted and stored at 2–8 °C
Gradient	:	5% B to 60% B in 30 min	**Evaluation**	:	Area Normalization
Flow Rate	:	1.0 mL/min	**Report Date**	:	2026-09-10
Column Temp	:	30 °C			
Detection	:	UV 220 nm			
Injection Vol.	:	10 µL			

SUMMARY OF RESULTS (2–8 °C)

Time Point	Assay (%)	Purity (%)	Total Impurities (%)	pH
Day 0 (Initial)	100.0	99.85	0.18	7.20
Day 30	99.7	99.72	0.28	7.17
Day 60	99.2	99.58	0.42	7.15
Day 90	98.9	99.43	0.57	7.13

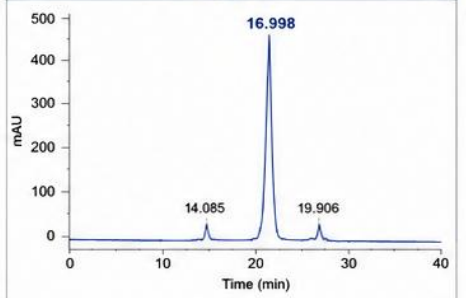
HPLC CHROMATOGRAMS (UV 220 nm)

Day 0 (Initial)



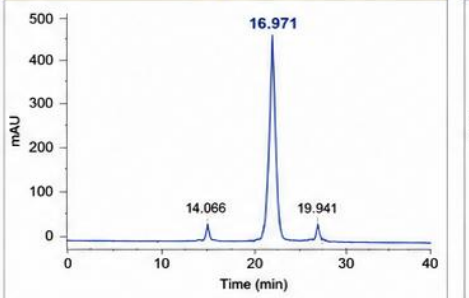
Peak No.	Retention Time (min)	Peak Name	Area (mAU*s)	Area (%)
1	14.128	Impurity 1	14,256	0.17
2	**17.025**	**Retatrutide**	**8,845,632**	**99.85**
3	19.887	Impurity 2	9,712	0.18
Total			**8,869,600**	**100.00**

Day 30



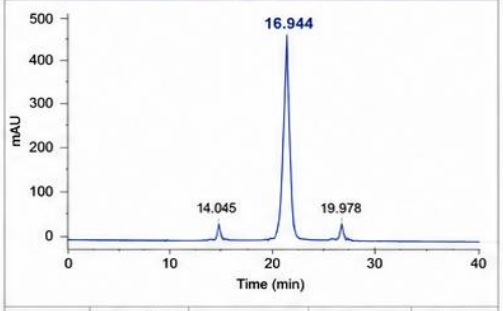
Peak No.	Retention Time (min)	Peak Name	Area (mAU*s)	Area (%)
1	14.085	Impurity 1	23,715	0.28
2	**16.998**	**Retatrutide**	**8,362,544**	**99.72**
3	19.906	Impurity 2	15,602	0.19
Total			**8,401,861**	**100.00**

Day 60



Peak No.	Retention Time (min)	Peak Name	Area (mAU*s)	Area (%)
1	14.066	Impurity 1	33,722	0.32
2	**16.971**	**Retatrutide**	**8,041,267**	**99.58**
3	19.941	Impurity 2	19,029	0.10
Total			**8,094,018**	**100.00**

Day 90

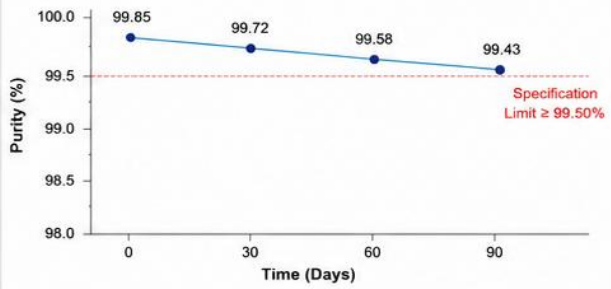


Peak No.	Retention Time (min)	Peak Name	Area (mAU*s)	Area (%)
1	14.045	Impurity 1	41,667	0.37
2	**16.944**	**Retatrutide**	**7,659,186**	**99.43**
3	19.978	Impurity 2	22,071	0.20
Total			**7,722,924**	**100.00**

STABILITY DATA (2–8 °C)

Time Point	Assay (%)	Purity (%)	Total Impurities (%)	pH	Appearance
Day 0 (Initial)	100.0	**99.85**	0.18	7.20	Clear, Colorless
Day 30	99.7	**99.72**	0.28	7.17	Clear, Colorless
Day 60	99.2	**99.58**	0.42	7.15	Clear, Colorless
Day 90	98.9	**99.43**	0.57	7.13	Clear, Colorless

Purity Trend Over 90 Days (2–8 °C)



SYSTEM SUITABILITY (Day 0)

Parameter	Result	Acceptance Criteria
Retention Time (Retatrutide)	17.03 min	N/A
Theoretical Plates (N)	18,742	≥ 10,000
Tailing Factor (T)	1.07	≤ 2.0
Resolution (Rs, Imp1)	4.71	≥ 1.5
Resolution (Rs, Imp2)	5.36	≥ 1.5

CONCLUSION

Under refrigerated conditions (2–8 °C), the reconstituted Retatrutide Injection Pen maintained excellent chemical stability for 90 days. Purity remained above 99.4%, with minimal increase in total impurities and no significant change in pH or appearance.