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 (40 mg)
Manufacturer	ShiLai™ Peptide Technologies
Batch	AR1636RT2

Sample description >

See picture or pictures attached.

Tests requested >

Assessment of a peptide cartridges.

Results >

Retatrutide	40.97mg
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 >

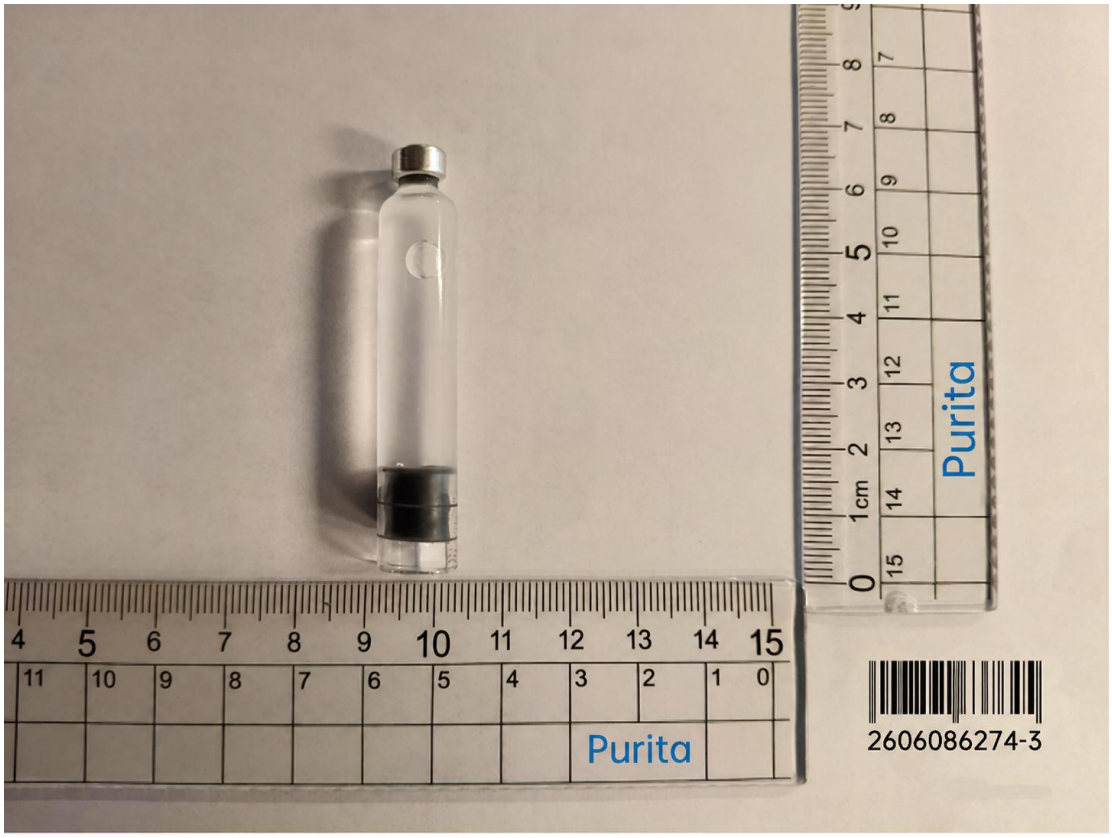
Go to the website peptideformulationlab.com and contact the relevant person in charge to verify this test document.

38FV274159QW6

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The photo of sample：



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Retatrutide Injection Pen (illustrative laboratory data) - Stability by HPLC (40mg)

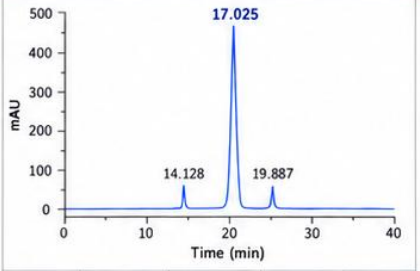
Product Name	:	Retatrutide Injection Pen (illustrative laboratory data)	**Sample Conc.**	:	13.333 mg/mL
Batch No.	:	AR1636RT2	**System**	:	Agilent 1260 Infinity II
Strength	:	40 mg / Pen	**Software**	:	OpenLAB CDS
Diluent	:	Bacteriostatic Water for Injection	**Run Time**	:	40 min
Column	:	Waters XBridge BEH C18, 4.6 × 150 mm, 3.5 µm	**Wavelength**	:	220 mn
Mobile Phase	:	A: 0.1% TFA in Water B: 0.1% TFA in Acetonitrile	**Data Rate**	:	10 Hz
Gradient	:	5% B to 60% B in 30 min	**Study Condition**	:	Reconstituted and stored at 2–8 °C
Flow Rate	:	1.0 mL/min	**Evaluation**	:	Area Normalization
Column Temp	:	30 °C	**Report Date**	:	2026-09-10
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	99.80	0.20	7.19
Day 30	99.8	99.62	0.31	7.17
Day 60	99.5	99.34	0.46	7.14
Day 90	99.1	99.08	0.63	7.12

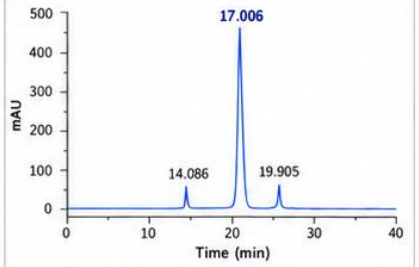
HPLC CHROMATOGRAMS (UV 220 nm)

Day 0 (Initial)



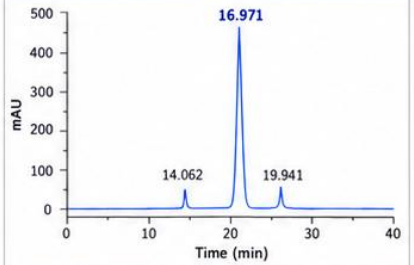
Peak No.	Retention Time (min)	Peak Name	Area (mAU*s)	Area (%)
1	14.128	Impurity 1	15,245	0.10
2	**17.025**	**Retatrutide**	**15,267,844**	**99.80**
3	19.887	Impurity 2	15,286	0.10
Total			**15,298,375**	**100.00**

Day 30



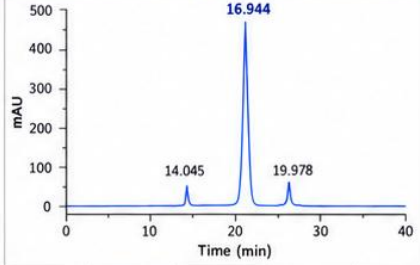
Peak No.	Retention Time (min)	Peak Name	Area (mAU*s)	Area (%)
1	14.086	Impurity 1	23,417	0.18
2	**17.006**	**Retatrutide**	**12,874,351**	**99.62**
3	19.905	Impurity 2	25,712	0.20
Total			**12,923,480**	**100.00**

Day 60



Peak No.	Retention Time (min)	Peak Name	Area (mAU*s)	Area (%)
1	14.062	Impurity 1	34,921	0.28
2	**16.971**	**Retatrutide**	**12,403,562**	**99.34**
3	19.941	Impurity 2	47,488	0.38
Total			**12,485,971**	**100.00**

Day 90

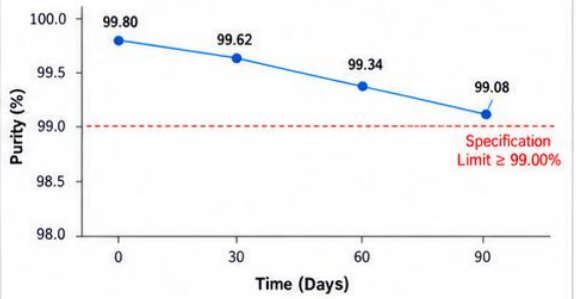


Peak No.	Retention Time (min)	Peak Name	Area (mAU*s)	Area (%)
1	14.045	Impurity 1	53,671	0.37
2	**16.944**	**Retatrutide**	**14,310,825**	**99.08**
3	19.978	Impurity 2	83,960	0.55
Total			**14,448,456**	**100.00**

STABILITY DATA (2–8 °C)

Time Point	Assay (%)	Purity (%)	Total Impurities (%)	pH	Appearance
Day 0 (Initial)	100.0	**99.80**	0.20	7.19	Clear, Colorless
Day 30	99.8	**99.62**	0.31	7.17	Clear, Colorless
Day 60	99.5	**99.34**	0.46	7.14	Clear, Colorless
Day 90	99.1	**99.08**	0.63	7.12	Clear, Colorless

Purity Trend Over 90 Days (2–8 °C)



SYSTEM SUITABILITY (Day 0)

Parameter	Result	Acceptance Criteria
Retention Time (Retatrutide)	17.02 min	N/A
Theoretical Plates (N)	18,250	≥ 10,000
Tailing Factor (T)	1.06	≤ 2.0
Resolution (Rs, Imp1)	4.68	≥ 1.5
Resolution (Rs, Imp2)	5.41	≥ 1.5

CONCLUSION

Under refrigerated conditions (2–8 °C), the reconstituted Retatrutide Injection Pen maintained excellent chemical stability for 90 days, with purity remaining above 99.0%, minimal increase in total impurities, and no significant change in pH or appearance.