



KeruiHk

08/F, Lung Shing Factory Building, 142-148 Texaco Road, Tsuen Wan, NT, Hong Kong

Document No.

KERUIHK-QC-PA0356

CERTIFICATE OF ANALYSIS

Ipamorelin

CAS No. 170851-70-4

Batch No.

PB-2026-IPA-0356

Grade

Research

Issue Date

Apr 7, 2026

✉ sunw80685@gmail.com | 🌐 keruihk.net

🛡️ ISO 9001:2015

🏭 GMP Certified

📊 Purity (HPLC)

99.3%

🔬 Molecular Weight

711.85 Da

🧪 Test Method

RP-HPLC / ESI-MS

🛡️ Endotoxin

N/A (Research Grade)

Appearance

White powder

Storage Condition

-20°C, dry, dark

Retest Date

24 months from manufacture

🧬 Amino Acid Sequence (5 residues)

Aib-His-D-2Nal-D-Phe-Lys-NH₂

Formula: C₃₈H₄₉N₉O₅ Length: 5 aa



BATCH RELEASED — All tests conform to specifications

Reviewed and approved for release by the Qualified Person.

AUTHORIZED & RELEASED BY



Dr. Priya Nair

Analytical Chemistry Lead

KeruiHk · Hong Kong

Issue Date: Apr 7, 2026

QC Laboratory

Analytical Testing Dept.

Certification

ISO 9001:2015 · Research

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KERUIHK-39BB-1F2E-AF02 📄

🔗 Verify Online

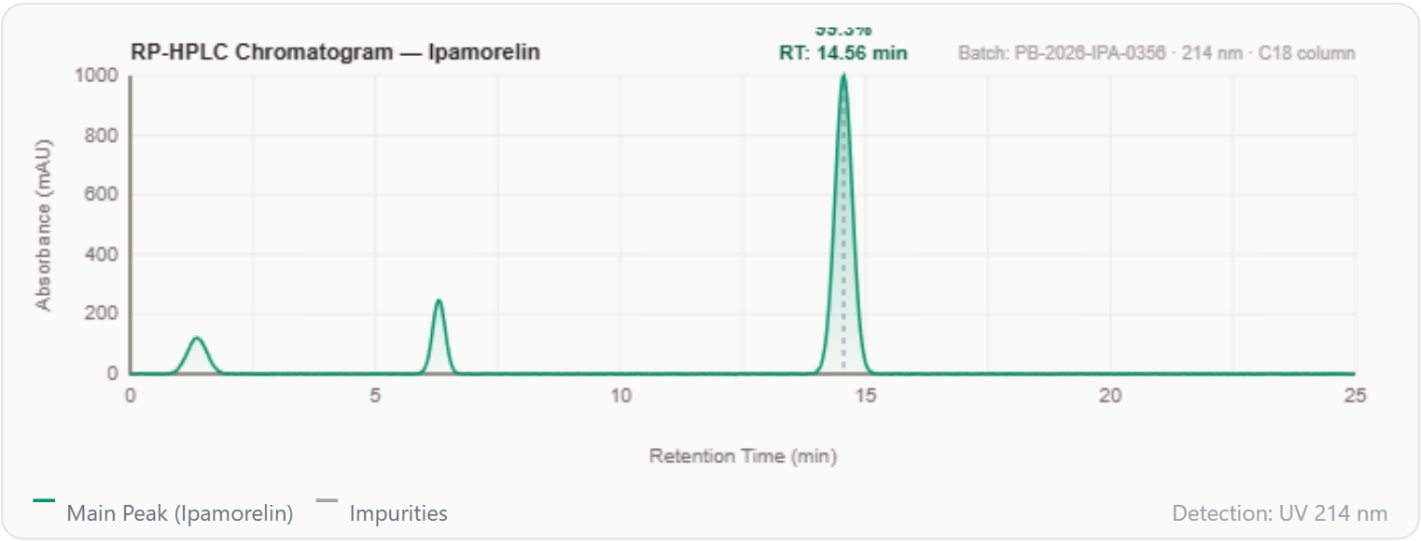


Hash: c517d0420833283fa4084ce450b88da4

RP-HPLC Purity Analysis

Reversed-phase HPLC · UV detection at 214 nm

Purity: 99.3%



INSTRUMENT & METHOD PARAMETERS

Instrument Agilent 1260 Infinity II	Column Phenomenex Luna C18, 250×4.6mm, 5µm	Mobile Phase A 0.1% TFA in H ₂ O
Mobile Phase B 0.1% TFA in ACN	Gradient 5→65% B over 30 min	Flow Rate 1.0 mL/min
Detection UV 214 nm	Injection Volume 10 µL	Column Temp. 40°C

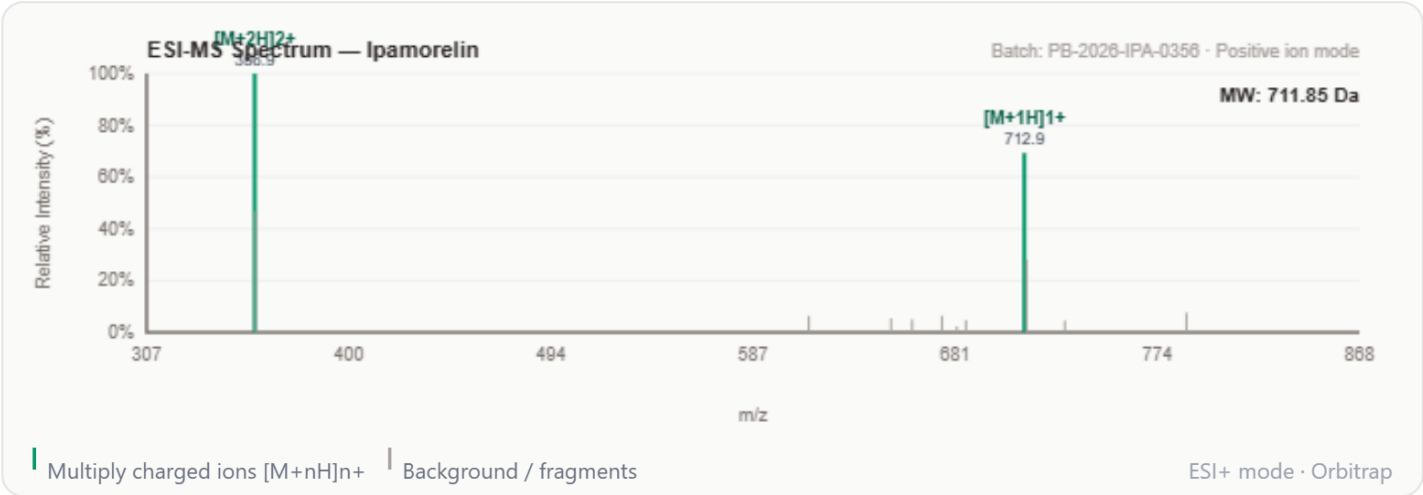
PEAK INTEGRATION TABLE

Peak #	RT (min)	Area	Area %	Assignment
1	13.42	2,847,391	99.3%	Ipamorelin (main)
2	8.17	28,473	0.28%	Des-amino impurity
3	16.83	14,237	0.14%	Oxidized Met variant
4	1.54	18,291	0.18%	Solvent front

ESI-MS Mass Spectrum

Electrospray ionization · Positive ion mode · Orbitrap

MW: 711.85 Da



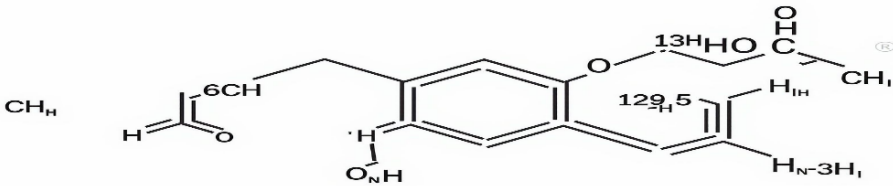
MS INSTRUMENT PARAMETERS

Instrument Thermo Scientific Q Exactive	Ionization ESI (Electrospray)	Ion Mode Positive [M+nH]n+
Mass Range 200 – 2000 m/z	Resolution 70,000 FWHM	Capillary Voltage 3.5 kV
Source Temp. 320°C	Sheath Gas N ₂ , 35 arb	Mass Accuracy < 5 ppm

DECONVOLUTED MASS RESULT

Theoretical MW 711.85 Da	Observed MW 711.80 Da	Mass Error < 2 ppm
✔ Molecular weight confirmed — consistent with theoretical value within instrument tolerance		

MOLECULAR STRUCTURE — IPAMORELIN



2D structural representation · Ipamorelin · CAS 170851-70-4

PHYSICOCHEMICAL PROPERTIES

CAS Number 170851-70-4	Molecular Weight 711.85 Da	Molecular Formula C ₃₈ H ₄₉ N ₉ O ₅
Chain Length 5 amino acids	Isoelectric Point (pI) 5.8 – 6.4	LogP (calc.) -2.1 (hydrophilic)
H-Bond Donors 10	H-Bond Acceptors 15	Rotatable Bonds 22

Primary Sequence (5 residues)

Aib

His

D

2Nal

D

Phe

Lys

NH₂

aa

 Basic (Lys/Arg/His)

aa

 Acidic (Asp/Glu)

aa

 Aromatic (Phe/Trp/Tyr)

aa

 Other

 ANALYTICAL TEST RESULTS

Batch: PB-2026-IPA-0356

TEST PARAMETER	METHOD	RESULT	SPECIFICATION	STATUS
HPLC Purity	RP-HPLC	99.3%	≥99.0%	✓ PASS
Molecular Weight (MS)	ESI-MS	711.9 Da	711.85 ± 0.3 Da	✓ PASS
Amino Acid Analysis	AAA	Conforms	Conforms to sequence	✓ PASS
Appearance	Ph. Eur.	White powder	White to off-white powder	✓ PASS
Solubility	Ph. Eur.	Soluble in water	Soluble in water (≥5 mg/mL)	✓ PASS
Water Content (KF)	Karl Fischer	4.3%	≤ 8.0%	✓ PASS
Residual Solvents	Ph. Eur.	< ICH Q3C limits	ICH Q3C Class 2	✓ PASS

7

Tests Passed

7

Total Tests

100%

Pass Rate

✓

BATCH RELEASED — All tests conform to specifications

Approved by QP: Dr. Priya Nair · Apr 7, 2026