

PREPARED FOR H&J Pharma	CLIENT WEBSITE vietnam-peptides.com	DISTRIBUTION Client confidential
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1 SAMPLE & ACCESSION

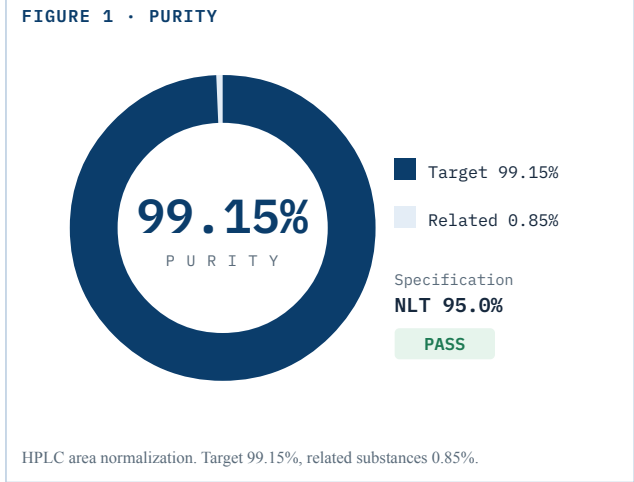
ANALYTE / IDENTITY Melanotan II (MT-2)	CAS NUMBER 121062-08-6	MOLECULAR FORMULA C50H69N15O9	MOLECULAR MASS (DA) 1024.20
SUBSTANCE CLASS Cyclic peptide, 7-mer	REFERENCE-DATA CONFIDENCE High	LOT NUMBER MT2-2026-0731-9289	LABELED CONTENT 10 mg
ACCESSION NO. ACC-2026-0820-MT2-1134	SAMPLE MATRIX Lyophilized	APPEARANCE Conforms	STORAGE -20 °C, protected from light
MANUFACTURED 07/31/2026	RETEST / EXPIRY 07/31/2028	DATE RECEIVED 08/15/2026	DATE ANALYZED 08/17/2026
RECONSTITUTION VOLUME 1.0 mL	DISPOSITION RELEASED		

	PURITY 99.15% PASS	IDENTITY Confirmed PASS	NET PEPTIDE 10.11 mg REPORTED	MOISTURE 3.66% PASS
	STERILITY No Growth PASS	ENDOTOXIN 0.155 PASS	HEAVY METALS ND PASS	

2 PURITY, QUANTITATION & IDENTITY HPLC · HPLC-RTM · LC-MS

PARAMETER	METHOD	SPECIFICATION	RESULT	UNIT	STATUS
Peptide purity (HPLC)	RP-HPLC-UV 214 nm	NLT 95.0%	99.15	%	PASS
Net peptide content	HPLC / AAA	Report only	10.11	mg	REPORTED
Identity (HPLC-RTM)	Retention-time match	Co-elution	Confirmed	—	PASS
Fentanyl screen	Immunoassay 50 ng/mL	Not Detected	Not Detected	—	PASS

Chromatographic purity of 99.15% is measured against a not-less-than 95.0% release criterion. Net peptide content of 10.11 mg is reported against a nominal 10 mg label claim.



3 REPRESENTATIVE CHROMATOGRAM

RP-HPLC-UV

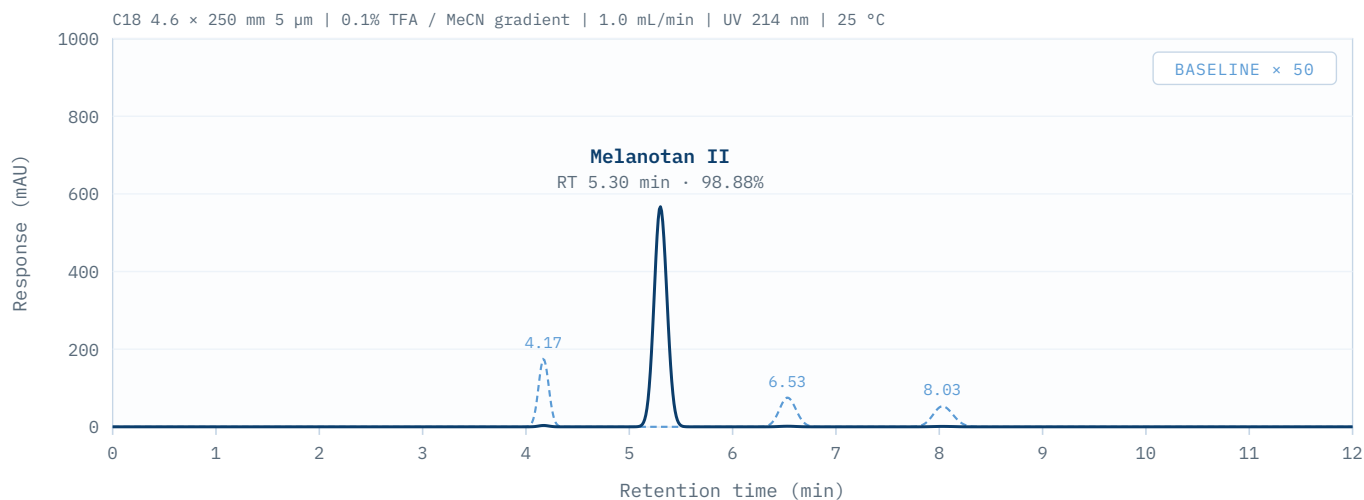


Figure 2. Trace reconstructed from the reported peak table — retention time, area, plate count and tailing factor define each peak envelope ($\sigma = t_R/\sqrt{N}$). Related substances shown magnified as the dashed trace, at the factor marked on the plot.

PEAK	RT (MIN)	AREA (µAU·S)	AREA %	PLATES (N)	TAILING
Melanotan II (principal)	5.30	4,944,000	98.88	8,365	1.08
Related substance 1 (RRT 0.79)	4.17	24,848	0.50	7,749	1.05
Related substance 2 (RRT 1.24)	6.53	17,060	0.34	7,496	1.08
Related substance 3 (RRT 1.51)	8.03	14,000	0.28	8,332	1.14
Total	—	4,999,908	100.00	—	—

4 MASS CONFIRMATION

LC-MS, ESI positive

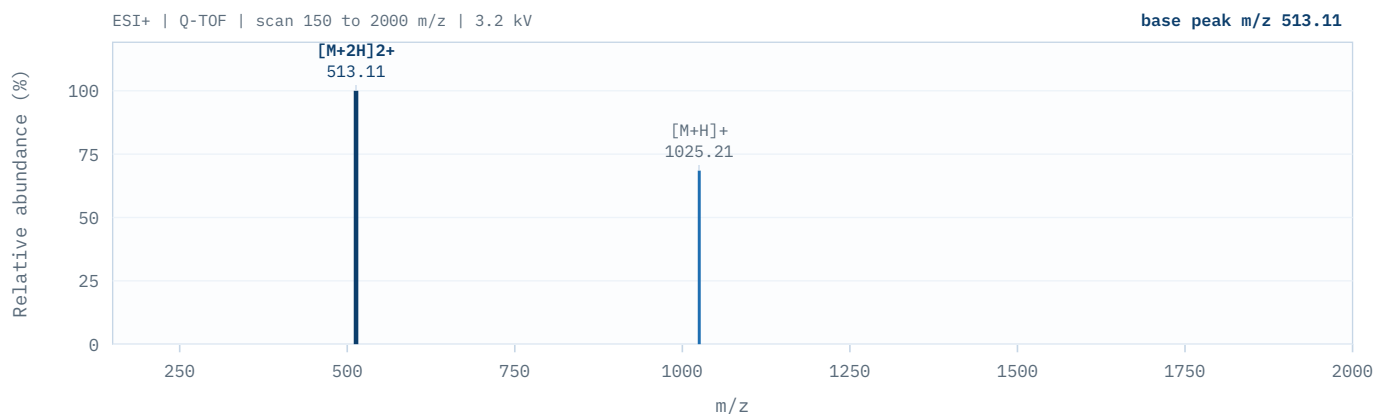


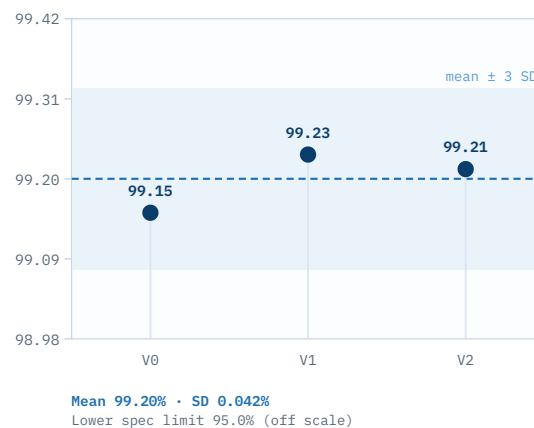
Figure 3. Theoretical ESI(+) charge-state ladder computed from 1024.20 Da. Replace with the acquired spectrum before issue.

5 BATCH CONFORMITY

three independently sampled units

UNIT	PURITY (%)	NET CONTENT (MG)	IDENTITY	STATUS
V0 (dedicated)	99.15	10.11	Confirmed	PASS
V1	99.23	10.11	Confirmed	PASS
V2	99.21	10.17	Confirmed	PASS

FIGURE 4 · CONFORMITY



6 COMPOSITION, MOISTURE & COUNTERION

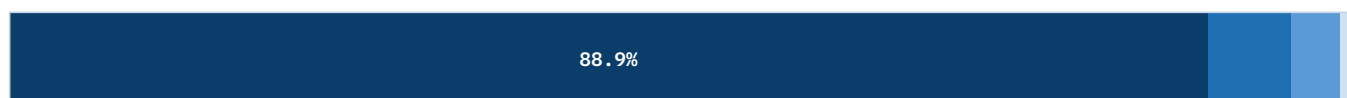
KF · IC · USP <467>

PARAMETER	METHOD	SPECIFICATION	RESULT	UNIT	STATUS
Net peptide content	HPLC / AAA	Report only	10.11	mg	REPORTED
Water (Karl Fischer)	USP <921>	NMT 8.0% w/w	3.66	% w/w	PASS
Counterion (acetate)	Ion chromatography	Report only	6.98	% w/w	REPORTED
Residual solvents (TFA)	USP <467> headspace GC	Not Detected	ND	—	PASS
Gross fill weight	Gravimetric	Report only	11.37	mg	REPORTED

7 MASS BALANCE PER VIAL

components must sum to the gross fill

Gross fill 11.37 mg



Active (Melanotan II (MT-2))	10.11 mg · 88.9%	Acetate counterion	0.71 mg · 6.2%
Water (Karl Fischer)	0.42 mg · 3.7%	Related substances	0.09 mg · 0.8%
Balance / matrix	0.05 mg · 0.5%		

Figure 5. Mass balance of the lyophilized cake. Components sum to 11.37 mg against a gross fill of 11.37 mg.

8 SAFETY & CONTAMINATION CONTROLS ICP-MS · USP <71> <61> <85>

PARAMETER	SPECIFICATION	RESULT	STATUS
Arsenic (As)	NMT 1.5 ppm	Not Detected	PASS
Cadmium (Cd)	NMT 0.5 ppm	Not Detected	PASS
Chromium (Cr)	NMT 10 ppm	Not Detected	PASS
Mercury (Hg)	NMT 1.5 ppm	Not Detected	PASS
Lead (Pb)	NMT 1 ppm	Not Detected	PASS
Sterility	No Growth (USP <71>)	No Growth	PASS
Bioburden	< 10 CFU/mL (USP <61>)	< 1	PASS
Bacterial endotoxin	NMT 5.00 EU/vial (derived)	0.155	PASS

FIGURE 6 · ELEMENTAL HEADROOM

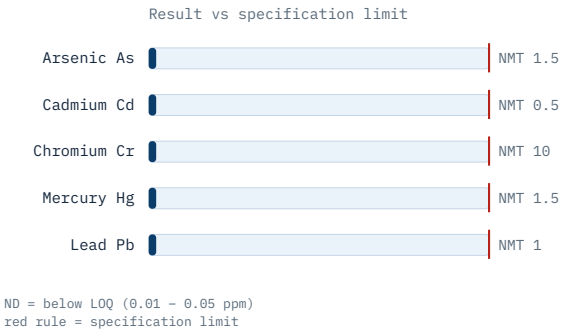
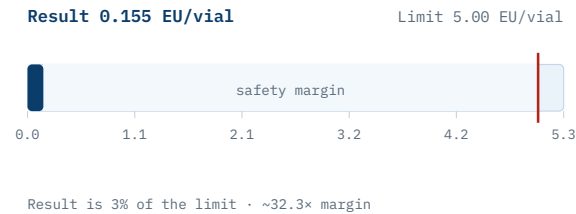


FIGURE 7 · ENDOTOXIN MARGIN



9 FOR THE RECIPIENT

plain-language summary

Purity (HPLC)	Percent of the main peak relative to all detected peaks.	Net peptide content	Measured mass of active, separate from water and salt.
NMT / NLT	Not more than / not less than — an acceptance limit.	Not Detected	Below the method limit of quantitation (LOQ).
EU/vial	Endotoxin units per vial, derived from the declared reconstitution volume.	RRT	Relative retention time; an impurity position versus the main peak.
Counterion	The salt partner of the peptide.	Karl Fischer	Titration for residual water (USP <921>).

Storage. Store the sealed lyophilized vial at -20 °C, protected from light. Reconstituted solution is stable at 2-8 °C; use within 30 days. **Reconstitution.** Add bacteriostatic or sterile water down the vial wall, swirl gently, do not shake. **Handling.** Research use only; not for human or veterinary use.

11 AUTHORIZATION

Laboratory Director

Name: Alejandro Navarro
Date: 08/20/2026

Quality Assurance

Name: Oliver Bennett
Date: 08/22/2026



AUTHENTICATE THIS CERTIFICATE

Scan the code or verify at <https://labcentro.com/coa-verification/?cert=COA-2026-0820-MT2-1134&code=TBQTHBFW>
Verification ID: TBQTHBFW

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