Certificate of Analysis

ILS Laboratories
8222 Vickers St, Suite 106, San Diego, CA 92111
(619) 329-3999 | ils-lab.com

KPV - 10mg

Tested for: Crush Research
https://www.crushresearch.shop/

PASS

COA #:	**COA-2026-X-ZWPN**	Method:	**Full QC Panel**
Lot Number:	**CR-KPV-10-2605-1**	Analysis Date:	**06/01/2026**
Accession #:	**ACC-2026-3083**	Appearance:	**Good**
Labeled Content:	**10mg**	Sample Matrix:	**Lyophilized**
		Date Received:	**05/22/2026**

Scan to verify authenticity at ils-lab.com
Access Code: 9VJ6BP3G

Identity	Peptide Purity	
KPV	**99.19%**	**Fentanyl Free**

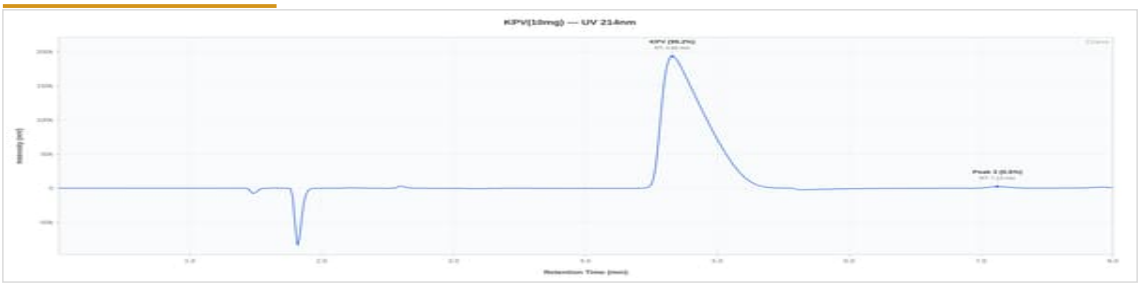


KPV 10mg - CR-KPV-10-2605-1

Purity & Quant (HPLC)

Analyte	Specification	Result	Unit	Status
Peptide Purity (HPLC)	>= 95.0%	**99.19%**	%	**PASS**
Net Peptide Content	Report Only	**10.53**	mg	N/A
Identity (HPLC-RTM)	KPV	**Confirmed**	-	**PASS**
Fentanyl Screen	Immunoassay, 50 ng/mL cutoff	**Not Detected**	-	**PASS**

HPLC Chromatogram



Representative chromatogram, Dedicated V0 (99.19% purity, closest to batch mean of 99.19%)

HPLC Conformity Testing Results (2 samples tested)

Sample	Purity	NPC	ID	Result
Dedicated V0	99.19%	10.53 mg	Confirmed	**PASS**
Conformity V1	99.19%	10.62 mg	Confirmed	**PASS**
Mean	**99.19%**	**10.57 mg**	—	—
Std Dev	—	**0.0450 mg**	—	—

Dr. Greg Kalyuzhny
Lab Director
6/1/2026

COA #: **COA-2026-X-ZWPN**
Access Code: **9VJ6BP3G**
Verify: portal.ils-lab.com/verify/WZed92Hw3bCp-hLY
Issued: 6/1/2026

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Heavy Metals Analysis (ICP-MS)

Test	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 Testing (PCR)

Test	Specification	Result	Status
Sterility (PCR)	No Growth	**No Growth**	**PASS**

Endotoxin Testing (USP <85>)

Test	Specification	Result	Status
Endotoxin (USP <85>)	NMT 5 EU/mL	**1.341 EU/mL**	**PASS**

Acceptance criteria: NMT 5 EU/mL per client specification.

Notes & Methodology

1. Date Tested: 06/01/2026. Methods: Purity & Quant (HPLC).
2. The sample was confirmed to be KPV by HPLC. Identification by chromatographic retention time comparison with a reference standard.
3. Elemental impurities analyzed by ICP-MS per USP <233> methodology. Acceptance criteria are internal laboratory quality screening limits for research-use materials and do not represent evaluation against any specific pharmacopeial monograph or product specification.
4. Endotoxin tested per USP <85> kinetic turbidimetric method. Acceptance criteria per client specification.
5. Peptide purity determined by RP-HPLC area normalization at 214 nm. Value represents the percentage of the target peptide relative to all peptide-related peaks. Non-peptide process-related impurities, if detected, are excluded from the calculation.
6. Chromatogram shown is representative: Dedicated V0 (99.19% purity, closest to batch mean of 99.19%).

Dr. Greg Kalyuzhny
Lab Director
6/1/2026

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