

KPV — Certificates of Analysis

Every batch we have tested for this product, newest first.
Match the strength on your vial to the rows below and turn to that page.

PAGE	STRENGTH	BATCH / LOT
2–3	10mg, 78mg	8/13/2026 · Lot IWR-081026KPV
4–8	10mg, 15mg, 58mg	8/2/2026 · Lot IWR-2607-KPV10L
9–10	5mg, 10mg, 11mg, 18mg	5/6/2026



Summit BioAnalytics | Nassau, The Bahamas | lab@summitbioanalytics.com |
summitbioanalytics.com

TESTED FOR

Iron Within Research

SAMPLE

KPV — 10 mg

PASS

BATCH #

IWR-081026KPV

PURITY

99.87%

MASS

10.78 mg

IDENTITY

Confirmed

COA #:

SBA-26-0085

Method:

Full QC Panel

Lot Number:

IWR-081026KPV

Analysis Date:

2026-08-13

Labeled Content:

10 mg

Date Received:

2026-08-10

Appearance:

White lyophilized powder, intact seal

Vial Cap:

Purple #760A7D



SCAN TO VERIFY



Identity



Purity



Endotoxins



Fentanyl Free

Test	Specification	Result
Identity	KPV	Confirmed
Purity (HPLC)	>= 98.0%	99.87%
Content (per vial)	Report only	10.78 mg/vial
Fentanyl Screen (LC-MS/MS)	Not detected	Not detected
Endotoxins (LAL)	Report Result	0.04 EU/mL
Sterility Screen (rapid PCR)	No growth	No growth
Heavy Metals (ICP-MS)	ICH Q3D limits	All analytes within limits

Qualitative and quantitative chemical analysis by RP-HPLC with UV detection; identity confirmed by LC-MS. Fentanyl screening by targeted LC-MS/MS. Sterility by rapid nucleic-acid amplification — a screening method, not compendial sterility per USP <71>. Full methodology available on request.

Kasey Malganus

Kasey Malganus

Lab Director

2026-08-13

COA #:

SBA-26-0085

Access Code:

94P86JF4

Analyst:

A. Grinder

Verify:

summitbioanalytics.com/verify

Issued:

2026-08-13

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This certificate relates only to the item tested, as received. Research use only — not for human or veterinary use. A not-detected screening result describes this sample only and is not a statement about any other unit or lot.

Lot Number: **IWR-4451178-P**
 Client Name: **Iron Within Research**
 Identity: **www.ironwithinresearch.com**

Received Date: **06/29/2026**
 Analysis Conducted: **06/24/2026**
 Searchable via: **horizonanalytical.com**

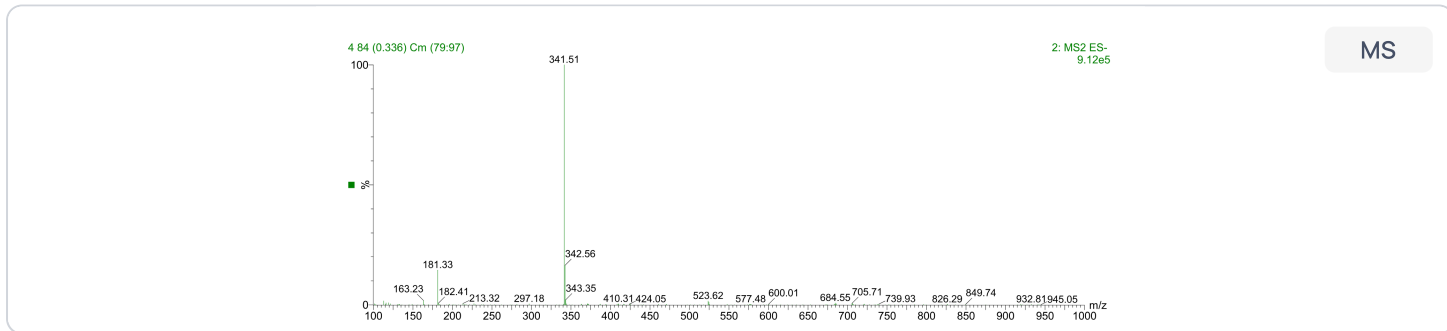
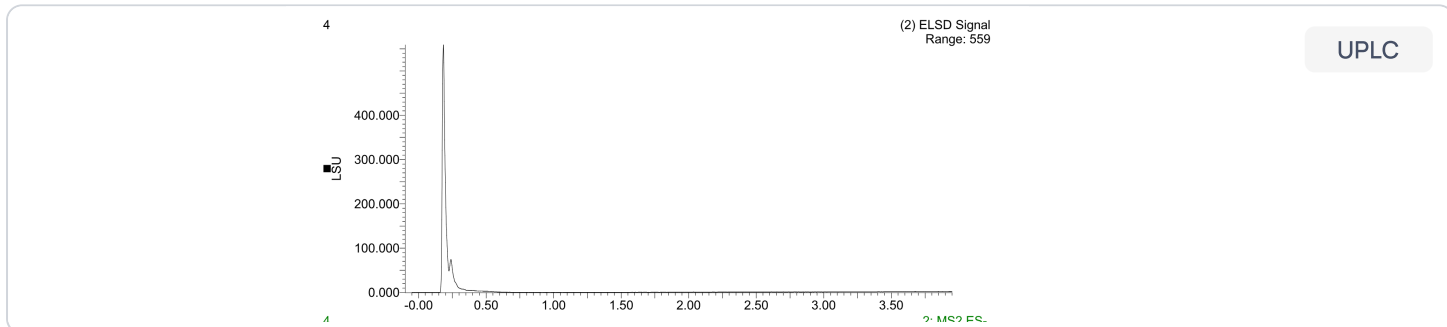
Compound:	KPV
Lot:	IWR-4451178-P
Appearance:	White Lyophilized Powder

CAS:	112965-21-6
Formula:	C ₁₇ H ₃₂ N ₆ O ₄
Mol Weight:	~384.48 g/mol

Pubchem CID: 9929972

Qualitative and Quantitative chemical analysis by Ultra High Performance Liquid Chromatography with Mass Spectrometry

	Specification	Result	Scan to Validate:
Compound Test:	KPV	KPV	
Quantity:	10mg	10.15mg	
Purity:	>98%	99.28%	



Aleksey Yevtodiyenko PhD
Research and Formulation Chemist

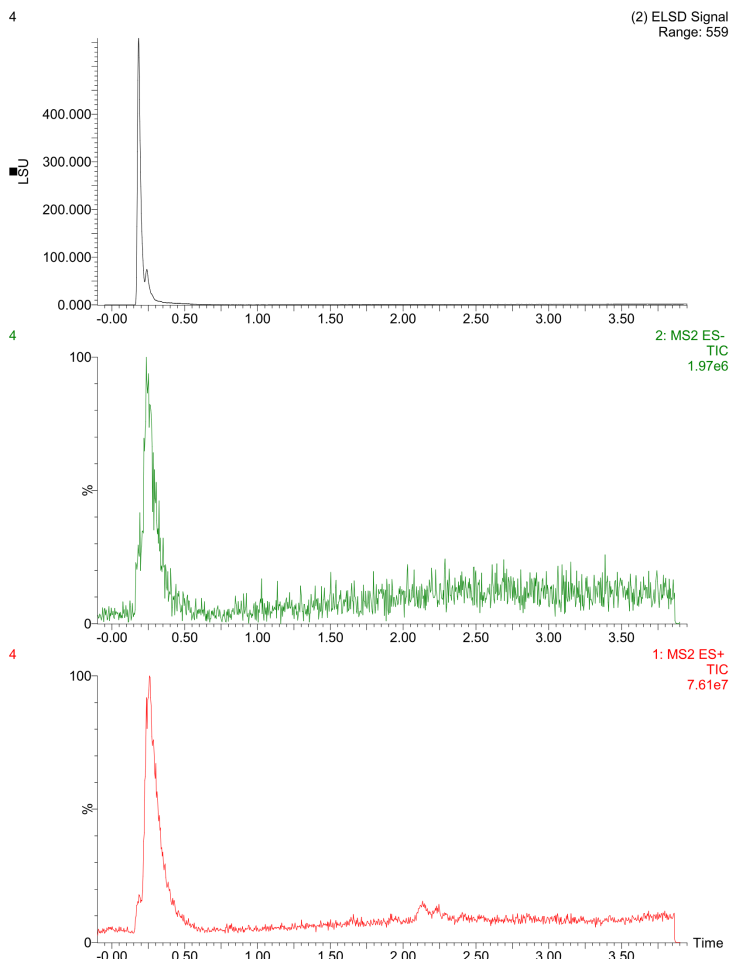


This purity analysis was conducted using UPLC/MS under standard laboratory conditions, following validated analytical protocols to ensure accurate and reliable results. This analysis is intended for informational and research applications.

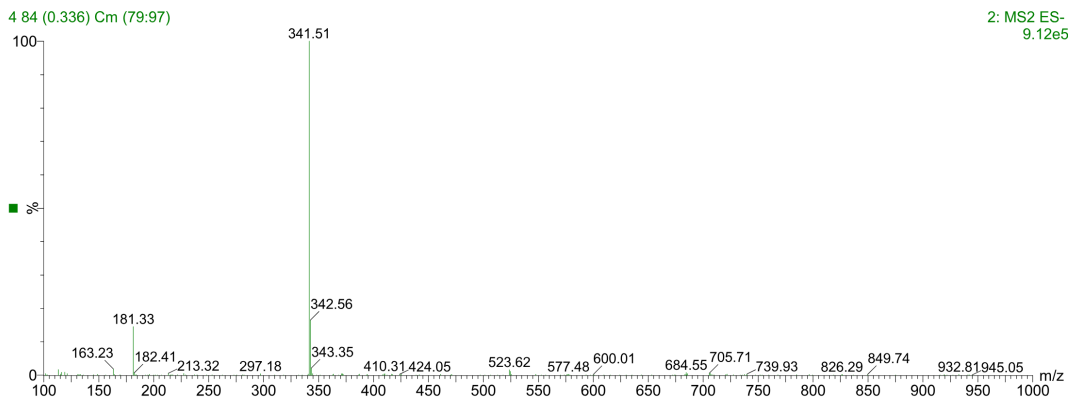
Lot Number: IWR-4451178-P
 Client Name: Iron Within Research
 Identity: www.ironwithinresearch.com

Received Date: 06/29/2026
 Analysis Conducted: 06/24/2026
 Searchable via: horizonanalytical.com

KPV (10mg) • Pubchem CID: 9929972
 Ultra High Performance Liquid Chromatography (UPLC)



Mass Spectrometry (MS)



Lot Number: IWR-4451178-E
Client Name: Iron Within Research
Identity: www.ironwithinresearch.com

Received Date: 06/29/2026
Analysis Conducted: 06/24/2026
Searchable via: horizonanalytical.com

Compound:	KPV
Lot:	IWR-4451178-E
Appearance:	-

CAS:	112965-21-6
Formula:	C ₁₇ H ₃₂ N ₆ O ₄
Mol Weight:	~384.48 g/mol

Pubchem CID: 9929972

Endotoxin Test

	Specification	Result	Scan to Validate:
Compound Test:	KPV	-	
Endotoxin:	-	0.075 EU/mL	

Aleksey Yevtodiyenko PhD
Research and Formulation Chemist



This endotoxin analysis was performed under standard laboratory conditions using validated testing methodologies to ensure accurate and reliable results. The analysis is intended for informational and research purposes only.

Contact at: contact@horizonanalytical.com

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summitbioanalytics.com

TESTED FOR

Iron Within Research

SAMPLE

KPV — 10 mg

PASS

BATCH #

IWR-2607-
KPV10

PURITY

99.04%

MASS

10.58 mg

IDENTITY

Confirmed

COA #:

SBA-26-0018

Method:

Full QC Panel

Lot Number:

IWR-2607-KPV10

Analysis Date:

2026-08-02

Labeled Content:

10 mg

Date Received:

2026-07-29

Appearance:

White lyophilized
powder, intact seal



SCAN TO VERIFY



Identity



Purity



Endotoxins



Fentanyl Free



VIAL CAP

Pink

#FB84B0

CLOSURE AS
RECEIVED

Test	Specification	Result
Identity	KPV	Confirmed
Purity (HPLC)	>= 98.0%	99.04%
Content (gross)	Report only	10.58 mg
Fentanyl Screen (LC-MS/MS)	Not detected	Not detected
Endotoxins (LAL)	Report Result	0.09 EU/mL

Test	Specification	Result
Sterility Screen (rapid PCR)	No growth	No growth
Heavy Metals (ICP-MS)	ICH Q3D limits	All analytes within limits

Qualitative and quantitative chemical analysis by RP-HPLC with UV detection; identity confirmed by LC-MS. Fentanyl screening by targeted LC-MS/MS. Sterility by rapid nucleic-acid amplification — a screening method, not compendial sterility per USP <71>. Full methodology available on request.

Kasey Malganus

Kasey Malganus
Lab Director
2026-08-02

COA #: SBA-26-0018
Access Code: J52KQLQU
Analyst: R. Whitfield
Verify: summitbioanalytics.com/verify
Issued: 2026-08-02

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Client:	Iron Within Research
Accession #:	2605060164
Search Code:	Iron2605060164
Received:	05/06/2026
Reported:	05/08/2026
Lot:	Grey Cap

Sample Summary

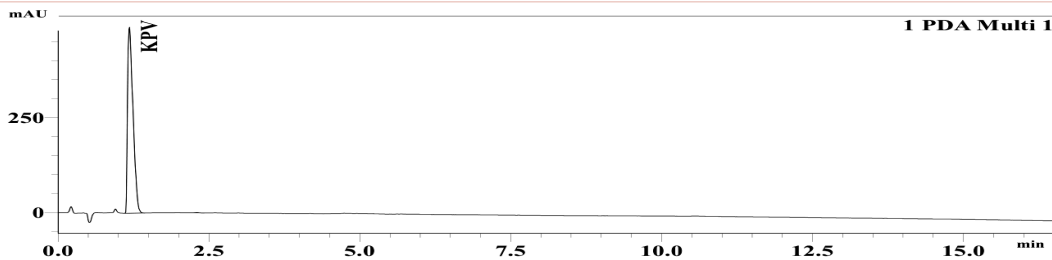
Product:	KPV 10mg	Purity:	99.89%
Identity:	Confirmed	Net Content:	13.18 mg
Appearance:	White Lyophilized Powder		

Analytical Results

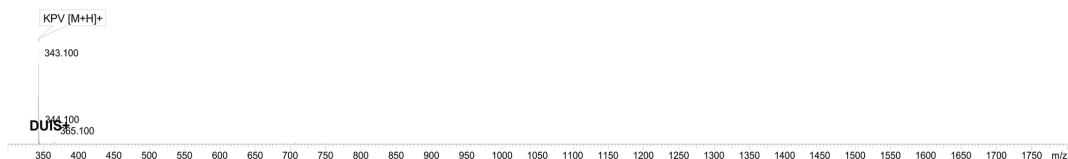
Test	Result
Identity (LC-MS)	KPV
Purity (HPLC-UV)	99.89%
Net Content	13.18 mg

Method: HPLC with UV detection coupled with mass spectrometry (LC-MS).

Chromatogram



Mass Confirmation




Principal Chemist

FreedomDiagnosticsTesting.com

Admin@FreedomDiagnostics.net

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The peptide purity analysis reported here was conducted using LCMS/MS under standard laboratory conditions. This analysis is intended for informational purposes only and is specific to the sample(s) provided. The peptides tested are intended for research use only and are not approved for human or veterinary use, diagnostic, therapeutic, or clinical applications. Results should be interpreted by qualified professionals within the scope of the intended research. The accuracy and reliability of the test may be influenced by sample integrity, handling, and other experimental variables.



Client: Iron Within Research
Accession #: 2605060163
Search Code: Iron2605060163
Received: 05/06/2026
Reported: 05/08/2026
Lot: Yellow Cap

Sample Summary

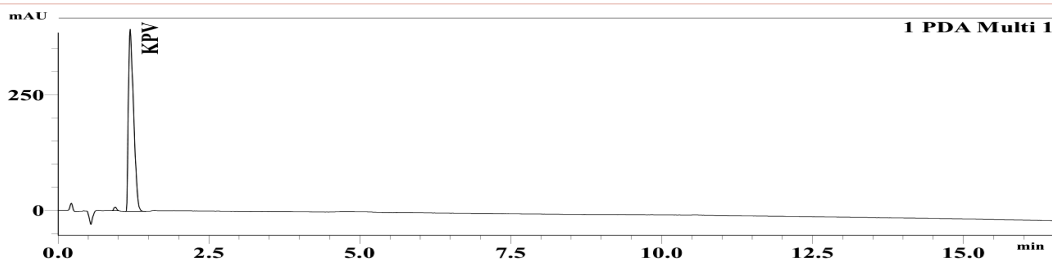
Product:	KPV 5mg	Purity:	99.01%
Identity:	Confirmed	Net Content:	4.11 mg
Appearance:	White Lyophilized Powder		

Analytical Results

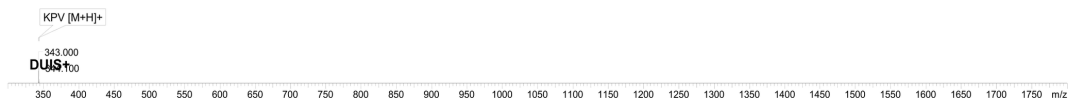
Test	Result
Identity (LC-MS)	KPV
Purity (HPLC-UV)	99.01%
Net Content	4.11 mg

Method: HPLC with UV detection coupled with mass spectrometry (LC-MS).

Chromatogram



Mass Confirmation



Alex Johnson

Principal Chemist

FreedomDiagnosticsTesting.com

Admin@FreedomDiagnostics.net

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