

ILS Laboratories

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

ARA-290 - 10

Tested for: Apex Amino

PASS



Scan to verify
authenticity at ils-lab.com
Access Code: W5JUYAAA

COA #: COA-2026-955794
Lot Number: A63981
Accession #: ACC-2026-6235
Labeled Content: 10

Analysis Date: 07/05/2026
Appearance: Good
Sample Matrix: Lyophilized
Date Received: 06/23/2026

Method: Full QC Panel

Identity

ARA-290

Peptide Purity

99.27%

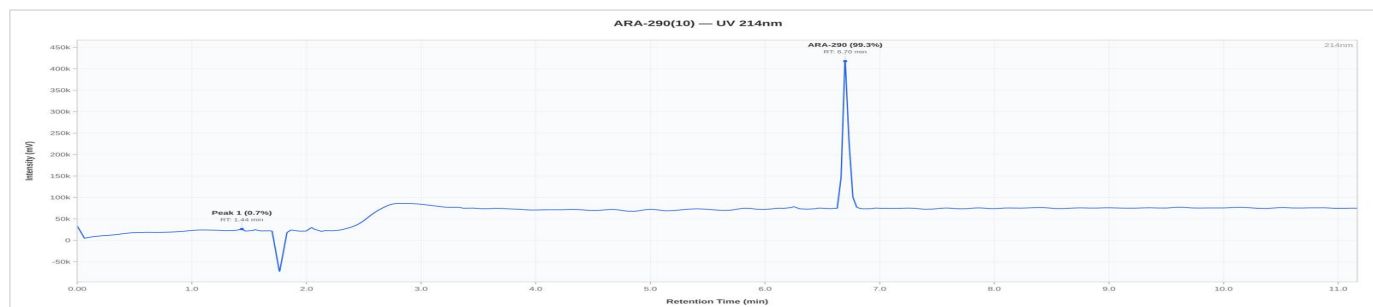


Fentanyl
Free

Full QC Panel

Analyte	Specification	Result	Unit	Status
Peptide Purity (HPLC)	>= 95.0%	99.27%	%	PASS
Net Peptide Content	Report Only	10.31	mg	N/A
Identity (HPLC-RTM)	ARA-290	Confirmed	-	PASS
Fentanyl Screen	Immunoassay, 50 ng/mL cutoff	Not Detected	-	PASS

HPLC Chromatogram



ARA-290 10 - A63981: UV Chromatogram

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



Dr. Greg Kalyuzhny

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Lab Director
7/5/2026

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Verify: portal.ils-lab.com/verify/f6Yi_1-6WTMugCkL
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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>)	Report Result	0.104 EU/mL	Reported

About this result: Endotoxin is reported as a quantitative value. Acceptable limits vary by product type and matrix, so no universal pass/fail threshold applies to RUO products. This result is below commonly referenced endotoxin thresholds.

Notes & Methodology

1. Date Tested: 08/12/2026. Methods: Full QC Panel.
2. The sample was confirmed to be ARA-290 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 chromogenic 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. This certificate reports analytical results for the sample(s) submitted to ILS Laboratories for testing. All sample identifications, product names, brand names, lot/batch numbers, and labeled content are provided by the submitting party and have not been independently verified. Results reflect only the analytical testing of the specific sample(s) provided and do not constitute an evaluation or endorsement of the manufacturer's processes, quality systems, or overall production. ILS Laboratories makes no representations regarding the intended use, safety, efficacy, regulatory status, or intellectual property ownership of any materials tested.




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