The Cenexa Pure™ Process:
From Lab to Your Research in 12 Steps

What Cenexa Pure™ Means for You

Cenexa Pure™ isn't just words... it's our standard and our guarantee to you. Every peptide we produce follows this exact process:

- **Sterile cleanroom synthesis** (built in ISO-certified labs)
- **Advanced HPLC purification** (≥99% verified purity)
- **Heavy metal & endotoxin testing** (free from hidden toxins)
- **Lyophilization freeze-drying** (gold-standard stability)
- **Nitrogen-sealed sterile vialing** (protected against oxygen & moisture)
- **Medical-grade freezer storage** until expedited shipping

SYNTHESIS

PURIFICATION & TESTING

STABILITY & DELIVERY

1 Pharma-Grade Raw Materials

Starting with the best

Every peptide begins with pharma-grade amino acids and reagents, tested and certified for purity.

Why it matters:
Contaminated starting blocks mean contaminated peptides— quality begins at the source.



2 Sterile, Cleanroom Manufacturing

Made in clean conditions

All synthesis takes place in ISO-certified cleanrooms with sterile equipment and filtered air.

Why it matters:
Prevents microbial contamination and ensures consistent quality — something many overseas labs skip.



3 *Solid Phase Peptide Synthesis (SPPS)*

Building the chain

Amino acids are added one by one to a resin scaffold, like snapping Lego bricks together in precise order.

Why it matters:
Resin holds the chain steady, ensuring each peptide is built exactly as designed.

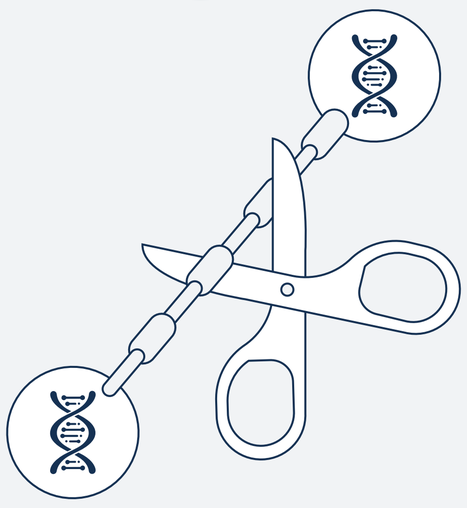


4 Cleavage & Deprotection

Freeing the peptide

Once the chain is complete, it is cut free from the resin and protective groups are removed.

Why it matters:
This releases the intact peptide so it can move on to purification

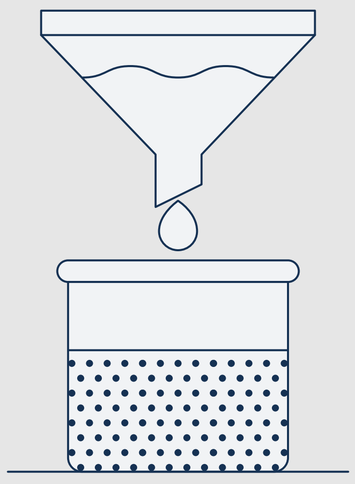


5 Crude Purification

First cleanup pass

The newly freed peptide is washed and filtered to remove solvents and large byproducts.

Why it matters:
Creates a safer, cleaner starting point before precision purification.

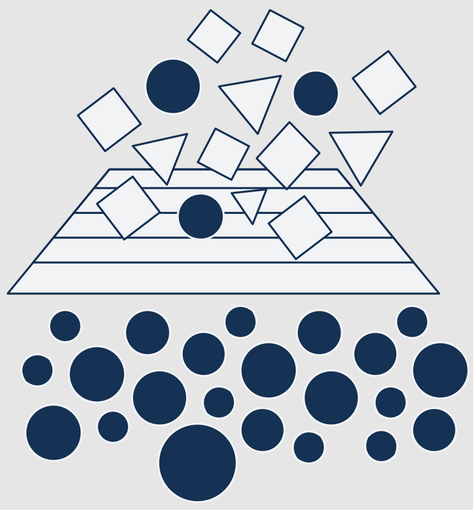


6 High-Performance Liquid Chromatography (HPLC)

Precision purification

HPLC separates the target peptide from look-alike fragments and impurities.

Why it matters:
Even a 0.5% impurity can change results — we purify to ≥99% verified purity.

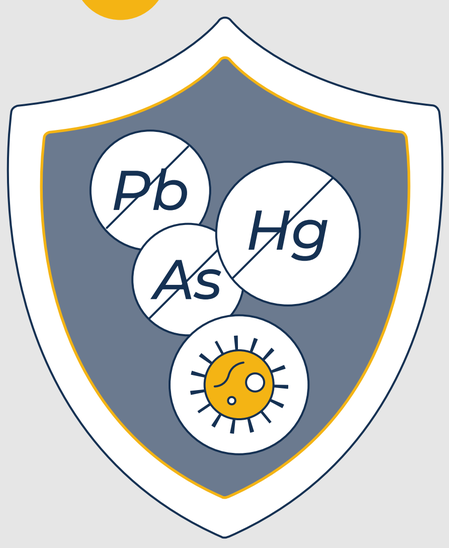


7 *Heavy Metal & Endotoxin Screening*

Hidden toxins removed

Every batch is tested for heavy metals (like lead, mercury, arsenic) and bacterial endotoxins.

Why it matters:
Many gray-market imports skip this — our peptides are guaranteed free of these contaminants.

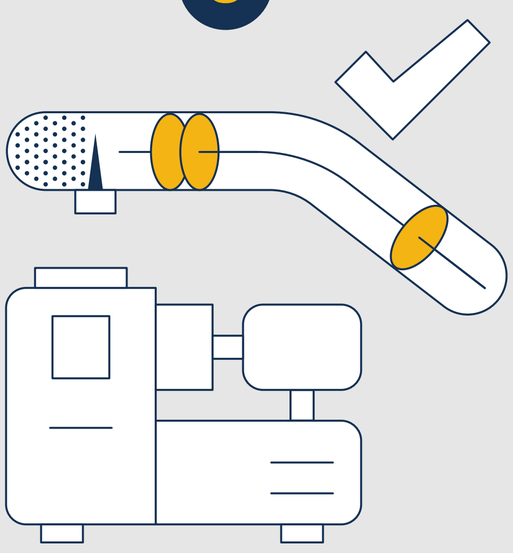


8 Analytical Quality Control

Identity verified

Advanced mass spectrometry and redundant HPLC confirm each peptide's identity, sequence, and purity.

Why it matters:
Guarantees the label matches the vial contents with no guesswork.



9 *Sterile Filtration & Aseptic Fill*

Final Sterile Safeguard

The purified solution is passed through a 0.22 µm sterile filter and filled into sterile vials under aseptic conditions.

Why it matters:
This pharma gold-standard step ensures every vial is free of microorganisms or particulates.

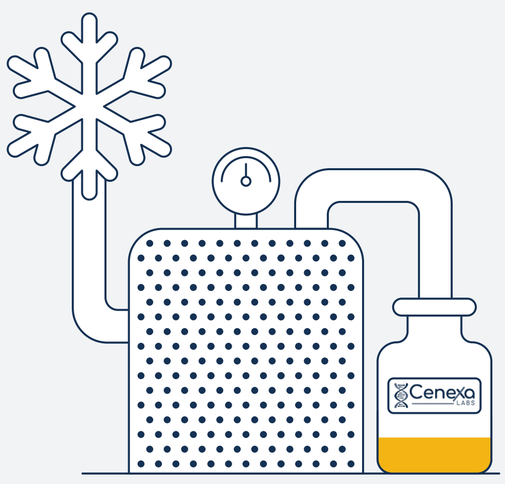


10 *In-Vial Lyophilization & Nitrogen Sealing*

Locked for Stability

Vials are freeze-dried under vacuum, then stoppered and sealed with nitrogen gas and desiccants.

Why it matters:
Preserves potency, prevents oxygen/moisture damage, and ensures long-term stability.

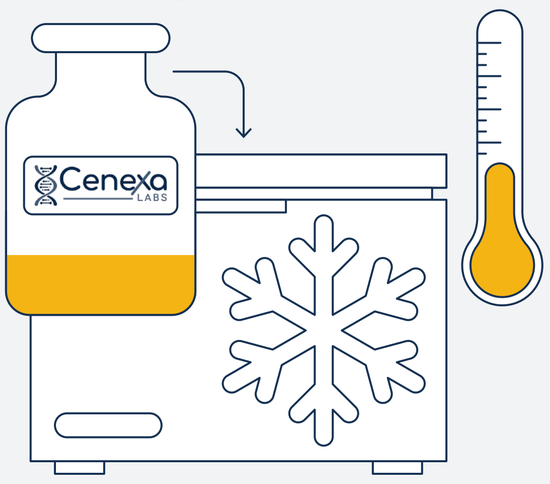


11 Medical-Grade Freezer Storage

Ultra-cold preservation

Finished vials are stored in ultra-low temp medical freezers at –80 °C (–112 °F) until shipment.

Why it matters:
Prevents molecular degradation and maintains peptide purity and strength.



12 *Expedited USA Shipping (2–3 Days)*

Fast, reliable delivery

Orders ship via expedited domestic carriers, arriving nationwide within 2–3 business days.

Why it matters:
No risk of peptide degradation from long transit or heat. No long waits - secure and on time delivery of your research peptides.

