



RESEARCH BUYER'S GUIDE · 2026 EDITION

The Peptide Buyer's Checklist.

23 questions every researcher should ask before placing a peptide order. Use it to vet any supplier — including us.

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For laboratory research use only. Not for human consumption.

Compound quality is your data.

If you're running in vitro or preclinical studies with research peptides, the purity and identity of the compound in your vial is upstream of every measurement, every figure, and every conclusion you publish.

Yet the research peptide market has real variability. Suppliers range from analytical-grade specialists with full third-party verification to drop-shippers reselling unverified material. The difference doesn't show up in marketing copy — it shows up in your data months later.

This checklist gives you 23 specific, verifiable questions to ask any supplier before placing an order — covering analytical methodology, documentation, supply chain, and compliance. It's vendor-agnostic. Use it to evaluate AQRO Research and every other supplier you consider.

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All compounds supplied for in vitro and preclinical laboratory investigation. Not for human consumption.

Five questions about the science.

- ✓ **What HPLC purity threshold do you guarantee?**
Anything less than $\geq 98\%$ by HPLC is a red flag for downstream-of-synthesis verification.
- ✓ **What HPLC method (RP-HPLC, gradient, detector) is used?**
Method specificity affects which impurities are actually resolved. Reverse-phase with UV detection is standard.
- ✓ **Are residual solvents (TFA, acetonitrile) quantified?**
Residual TFA from cleavage steps can affect biological activity in sensitive assay systems.

- ✓ **Is mass spectrometry confirmation performed per batch?**
ESI-MS or MALDI-TOF confirms expected molecular weight — HPLC alone cannot detect all sequence errors.
- ✓ **Is amino acid composition analysis performed on representative lots?**
Adds an orthogonal identity check beyond MS. Useful for novel or complex sequences.

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Four questions about the paper trail.

Is the COA batch-specific (not generic)?

A batch-specific COA lists the actual lot number you received. Generic 'specification sheets' are not COAs.

Are the original chromatograms available on request?

A reputable supplier can produce the raw HPLC trace for any lot they've shipped you.

Does the COA name a third-party testing laboratory?

Self-issued COAs are a red flag. ISO 17025-accredited independent labs are the standard for analytical chemistry.

Does the COA include a sequence ID / molecular weight check?

Should explicitly state the expected MW and the value obtained from MS analysis.

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Cold chain and handling.

✓ **Are peptides shipped with cold-chain protection?**

Lyophilized peptides are generally stable at ambient briefly, but sensitive sequences benefit from gel packs in transit.

✓ **What's the recommended long-term storage temperature?**

Standard is -20°C or lower for lyophilized; -80°C for reconstituted aliquots. Should be on the COA.

✓ **Are tracking numbers provided automatically?**

Basic, but some operations still don't do it. Critical for cold-chain ETA planning.

✓ **Is each vial individually labeled with lot + compound?**

Manual relabeling at your end is an error vector. Pre-labeled vials reduce risk.

✓ **How long does each batch typically take to ship?**

24–48 hours from order to shipment is normal for in-stock catalog SKUs.

✓ **Is international shipping available with proper documentation?**

If you're outside the US, ask about customs handling — research compounds have specific paperwork requirements.

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Four questions about the supply chain.

✓ **Is the supplier compliant with research-use-only labelling?**
Compounds must be labeled and sold as research-use-only. Any therapeutic, dosing, or human-use language on packaging is a serious red flag.

✓ **Do they sell to qualified researchers only?**
A reputable supplier verifies institutional affiliation or research purpose for sensitive compounds.



✓ **Where is the manufacturing performed?**
Country of synthesis affects quality control standards. Suppliers should be transparent about this.

✓ **Is documentation available for institutional purchasing (W-9, COI)?**
If you're buying through a university or research org, you'll need these for accounting. Slow responses here predict slow responses everywhere.

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Eight red flags to walk away from.

-  **Purity claims without numerical methodology**
'Pharmaceutical-grade' or 'research-grade' without an HPLC % and method is marketing copy, not science.
-  **No third-party laboratory named**
Self-issued COAs from the supplier itself are not independent verification.
-  **Pricing dramatically below market**
Synthesis and analytical verification have real cost floors. Prices well below them suggest skipped steps.
-  **Slow / inconsistent COA delivery**
Reputable suppliers can produce the COA before you ask. Chasing documentation is a workflow tax.
-  **Generic COA reused across lots**
If the lot number on the COA doesn't match your shipment, the COA isn't documenting your material.
-  **Therapeutic language on packaging or website**
Dosage, 'treatment,' 'cycle,' or human-use language indicates the supplier is not compliant with research-use-only sale.
-  **No technical contact available**
If you can't get a sequence or MS question answered, you can't trust the science.
-  **Refusal to ship in cold pack**
Either they don't have the operation, or they're cutting corners on cold-chain.

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ABOUT AQRO RESEARCH

We built this checklist to be used against us.

Every question in this guide is one AQRO Research has a direct, documented answer to. Run the checklist on us, run it on every supplier you consider, and the data will sort the field.

CATALOG

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57 research compounds

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Quote & COA requests

WHOLESALE

AQROResearch.com/wholesale

Volume tier pricing



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