

KAIA PEPTIDES — PRODUCT SHEET

Retatrutide (12mg)

Triple-Action Metabolic Peptide – Appetite, Blood Sugar & Fat-Burning Pathways

What It Is

Retatrutide is a next-generation triple-agonist peptide researched for its impact on metabolic health, appetite regulation, energy balance, and body-composition support. It targets **three major metabolic receptors** simultaneously — GLP-1, GIP, and glucagon receptors — giving it a broader and stronger metabolic profile than single-pathway peptides.

Understanding Retatrutide — A Metaphorical Story

Imagine your body as an enormous, high-tech train system.

This train represents your metabolism, constantly moving fuel (food) through the body and deciding:

- How much energy you burn
- How much you store
- How fast your engine runs
- How often you feel hungry
- How clearly the signals flow

Most people have a problem:

Their train is running with broken signals, slow engines, and overloaded cargo cars.

This leads to:

- Excess fuel storage
- Constant hunger
- Low energy
- Slower fat-burning
- Poor metabolic efficiency

Now imagine one engineer hops aboard to help. That's a GLP-1 agonist.

But Retatrutide is different.
It doesn't send **one** engineer.

It sends **three**.

Three elite specialists who work together to reset the entire railway system.

Engineer #1 — The Signal Controller (GLP-1 Pathway)

This engineer fixes the signals that control:

- Hunger
- Satiety
- Cravings
- Digestive rate

Once repaired, the train stops overloading with excess fuel and starts running more efficiently.

Engineer #2 — The Fuel Manager (GIP Pathway)

This one optimizes **how fuel is used**, not just how much comes on board.

- Improves insulin signaling in research models
- Helps convert fuel into usable energy
- Reduces unnecessary storage

If GLP-1 fixes the appetite signals...

GIP fixes the way the body responds to the fuel you do eat.

Engineer #3 — The Engine Modulator (Glucagon Pathway)

This engineer goes straight to the engine room.

He turns on the systems that support:

- Fat-burning
- Energy expenditure
- Metabolic activation

He makes the train lighter, faster, cleaner, and more efficient.

The Result: A Fully Upgraded Metabolic Railway

With all three engineers working together:

- The train eats less fuel
- Uses fuel more intelligently
- Burns off stored energy
- Runs faster and cleaner
- Becomes more efficient every day

This is the simplest way to understand how Retatrutide's **triple-pathway activation** supports metabolic balance, appetite regulation, and body-composition changes in research models.

Primary Research Benefits

(Summarized from early clinical and mechanistic literature)

• Appetite & Craving Control

- Supports satiety signaling
- Reduces hunger and compulsive eating in models
- Slows gastric emptying

• Metabolic Regulation

- Supports glucose balance
- Enhances insulin response in research
- Modulates fat-burning pathways

• Body-Composition Support

- Activates energy expenditure pathways
- May reduce visceral fat in metabolic models
- Helps improve metabolic efficiency

• Triple-Pathway Activation

- GLP-1: appetite + satiety

- GIP: nutrient signaling
 - Glucagon: fat-burning + energy output
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Common Research Use Cases

- Metabolic health studies
 - Appetite and satiety signaling research
 - Weight-management modeling
 - Insulin & glucose regulation experiments
 - Energy-expenditure pathway research
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Typical Research Protocols (Literature-Based)

(For educational/reference purposes; not medical advice)

- **Duration:** 8–16 weeks
 - **Frequency:** Once weekly in most research models
 - **Vial:** 12mg lyophilized peptide
 - **Common Dilution:** Reconstituted with bacteriostatic water
 - **Route:** Subcutaneous administration in research studies
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Storage & Stability

- Store lyophilized peptide at **2–8°C**
 - Refrigerate after reconstitution; use within **30 days**
 - Protect from heat and light
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Safety Profile (Research-Based Notes)

- Non-stimulatory
 - Early research shows potential GI-related effects similar to GLP-1 agonists
 - Strong metabolic signaling impact
 - No major toxicity reported in available studies
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Format

- **12mg lyophilized powder**
 - Research Use Only
 - Purity: **≥99%** (verified by third-party analysis)
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Legal & Compliance

For Research Use Only. Not for human consumption.

Not approved by the FDA to diagnose, treat, cure, or prevent any disease.

Brand Finishing (Kaia Style)

Triple-pathway metabolic intelligence.

Built for researchers studying the future of metabolic health.