PRODUCT SPECIFICATION

Retatrutide 50 mg

LY3437943 — investigational triple receptor agonist at the GIP, GLP-1, and glucagon receptors, supplied as a lyophilized research compound.

CAS NUMBER	MOLECULAR WEIGHT	PURITY	PHYSICAL FORM
2381089-83-2	4,731.33 g/mol	≥ 99% (HPLC-MS)	Lyophilized powder

1 PRODUCT IDENTIFICATION

Product Name	Retatrutide 50 mg
Product Code	PCR-RETA-50
Compound Type	Synthetic triple receptor agonist — GLP-1 / GIP / glucagon (GCGR) pathways
Synonyms / Other Names	Retatrutide; LY-3437943; LY3437943; GGG tri-agonist
Amino Acid Count	39
Amino Acid Sequence	Y-{Aib}-QGTFTSDYSI-{α-Me-Leu}-LDK-{Lys(AEEA-γGlu-C20 diacid)}-AQ-{Aib}-AFIEYLLEGGPSSGAPPPS-NH_2
Vial Contents	50 mg lyophilized peptide, single vial
Research Category	Metabolic research peptide
Development Status	Investigational — under clinical study, not an approved product

2 CHEMICAL AND PHYSICAL PROPERTIES

CAS Number	2381089-83-2
Molecular Formula	$C_{221}H_{342}N_{46}O_{68}$ (free peptide)
Molecular Weight	4,731.33 g/mol (free peptide)
Structural Notes	GIP peptide backbone incorporating three non-coded residues (Aib2, αMeL13, Aib20); C20 fatty diacid conjugated via a linker at Lys17
Appearance	White to off-white lyophilized powder
Physical State	Lyophilized solid
Purity	≥ 99% by HPLC-MS

RESEARCH USE ONLY — NOT FOR HUMAN OR VETERINARY USE. This document is not a Certificate of Analysis; batch-specific data is issued per lot.

3 SOLUBILITY AND RECONSTITUTION

Solubility	Approximately 20 mg/mL in water; approximately 50 mg/mL in DMSO (10.57 mM)
Recommended Diluent	Bacteriostatic water — supplied complimentary with every peptide order
Solution Handling	Prepare fresh, keep cold, and avoid repeated freeze-thaw cycles

Note: as a lipid-conjugated peptide, the reconstituted solution may appear slightly turbid. This is expected and is not an indication of degradation.

4 STORAGE AND STABILITY

Storage — Sealed Vial	Freeze at ≤ −20 °C, sealed, away from light and moisture
Shelf Life — Sealed	Approximately 24 months under recommended storage conditions
Storage — After Reconstitution	Refrigerate at 2–8 °C
In-Use Period	28–30 days after reconstitution
Conditions to Avoid	Heat, direct light, moisture, and repeated freeze-thaw cycles

5 QUALITY ASSURANCE AND DOCUMENTATION

Analytical Method	High-performance liquid chromatography with mass spectrometry (HPLC-MS)
Batch Testing	Independent third-party analysis for identity, purity, and contaminants
Certificate of Analysis	Issued per batch — available at peptidescostarica.net/lab-tests-coa-results/
Batch / Lot Number	Refer to the vial label and the accompanying Certificate of Analysis

6 INTENDED USE AND REGULATORY STATUS

Intended Use	Research Use Only (RUO) — laboratory, analytical, and scientific applications
Uses Advised Against	Not for human or veterinary use. Not a drug, food, cosmetic, dietary supplement, or household product. Not for diagnostic or therapeutic use.
Regulatory Status	Investigational compound. Not approved or licensed by the U.S. FDA, the EMA, or Costa Rica's Ministerio de Salud for the prevention, diagnosis, treatment, or cure of any disease.
Distribution	Supplied within Costa Rica

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DOCUMENTATION
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COA database:
/lab-tests-coa-results/

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