

SAFETY DATA SHEET

Retatrutide

Prepared in accordance with Regulation (EC) No 1907/2006 (REACH) and the Globally Harmonized System (GHS).

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Supplied by	Nordic Bio · Germany
Format	Pre-filled research pen (6 mg, 15 mg, 30 mg)

Research Use Only. This document supports laboratory and analytical research use. Not a substitute for full chemical hygiene plans or institutional biosafety procedures.

Section 1. Identification

Product name	Retatrutide
Synonyms	LY3437943
CAS number	2381089-83-2
Chemical class	Synthetic 39-amino-acid peptide; triple agonist of GLP-1R, GIPR, GCGR
Recommended use	Research reference material for in vitro laboratory and analytical studies
Uses advised against	Human, veterinary, diagnostic, or therapeutic use
Supplier	Nordic Bio, Germany
Emergency contact	research@nordic-bio.com

Section 2. Hazard identification

GHS classification

Not classified as hazardous under Regulation (EC) No 1272/2008 (CLP) based on available data. This substance is a synthetic peptide and has limited hazard data outside its pharmacological action, which is not relevant in vitro at handling exposure levels.

Signal word

None required under current classification.

Hazard statements

None required under current classification.

Precautionary statements

P262: Do not get in eyes, on skin, or on clothing. P270: Do not eat, drink, or smoke when using this product. P280: Wear protective gloves and eye protection. P501: Dispose of contents and container in accordance with local regulations.

Section 3. Composition and information on ingredients

Active ingredient	Retatrutide (LY3437943)
CAS number	2381089-83-2
Molecular formula	$C_{221}H_{343}F_2N_{51}O_{61}$
Molecular weight	4,731.2 Da
Purity	≥ 99 percent (HPLC; see Certificate of Analysis)
Formulation	Aqueous solution in citrate-based buffer, pre-filled in injection pen cartridge

Section 4. First aid measures

Inhalation

Move the affected person to fresh air. Seek medical attention if any symptoms develop or persist.

Skin contact

Wash affected area with soap and water. Remove contaminated clothing. Seek medical attention if irritation occurs.

Eye contact

Flush eyes immediately with plenty of water for at least 15 minutes, holding eyelids open. Seek medical attention.

Ingestion

Rinse mouth with water. Do not induce vomiting. Seek immediate medical attention.

Accidental injection

Accidental needle-stick or injection during handling requires immediate medical attention. Provide this Safety Data Sheet and the product carton to the attending clinician.

Section 5. Fire-fighting measures

Suitable extinguishing media: water spray, foam, dry chemical, or carbon dioxide. In case of fire, wear self-contained breathing apparatus and full protective clothing. Combustion may release nitrogen oxides and other irritant gases. Avoid breathing smoke or vapours.

Section 6. Accidental release measures

Personal precautions: Wear appropriate personal protective equipment as described in Section 8. Avoid contact with skin, eyes, or clothing. Ensure adequate ventilation.

Environmental precautions: Do not discharge into drains or watercourses. Contain spillage to prevent environmental release.

Containment and cleanup: Absorb spillage with inert absorbent material. Place in a labelled waste container for disposal as biological / pharmaceutical research waste. Decontaminate the affected area with appropriate

detergent.

Section 7. Handling and storage

Handling

Use only in well-ventilated laboratory areas. Avoid contact with skin, eyes, and clothing. Use a fresh sterile needle for each dispensing event. Do not eat, drink, or smoke when handling this material. Wash hands thoroughly after handling.

Storage

Store unopened pens refrigerated at 2 °C to 8 °C in original packaging. Protect from light. Do not freeze. After first use, the pen may be stored refrigerated for up to 28 days. Discard after the in-use period.

Section 8. Exposure controls and personal protection

Engineering controls

Use in a properly ventilated laboratory. No specific engineering controls required beyond normal good laboratory practice.

Personal protective equipment

Eye protection: safety glasses or goggles. Skin protection: laboratory coat and nitrile or latex gloves. Respiratory protection: not normally required under normal handling conditions.

Exposure limits

No occupational exposure limits have been established for this substance.

Section 9. Physical and chemical properties

Appearance	Clear, colourless aqueous solution
Odour	Odourless
pH	Approximately 7.0 (formulated)
Solubility	Soluble in water; formulated in aqueous buffer
Stability (unopened)	Stable at 2 to 8 °C until expiry on carton
Stability (in-use)	Up to 28 days at 2 to 8 °C after first use
Molecular weight	4,731.2 Da
Decomposition temperature	Not determined
Flash point	Not applicable (aqueous formulation)

Section 10. Stability and reactivity

Reactivity: No specific reactivity hazards under recommended storage and handling conditions.

Chemical stability: Stable under recommended storage conditions. Sensitive to freezing, elevated temperatures, and prolonged light exposure.

Conditions to avoid: freezing, temperatures above 30 °C, direct sunlight, freeze-thaw cycles.

Incompatible materials: strong oxidising agents, strong acids and bases.

Hazardous decomposition: thermal decomposition may release carbon oxides, nitrogen oxides, and sulphur oxides.

Section 11. Toxicological information

Acute toxicity: No occupational toxicity data are available for the formulated product. Retatrutide is a synthetic peptide pharmacologically active as a triple agonist of GLP-1, GIP, and glucagon receptors. Pharmacological data are derived from in vivo studies in clinical research contexts and are not directly applicable to laboratory handling exposure.

Routes of exposure: skin contact, eye contact, inhalation of aerosols, accidental injection or ingestion.

Carcinogenicity: based on pre-clinical findings in rodents at high doses, the active ingredient may carry a theoretical risk relevant to therapeutic dosing. This is not considered relevant to laboratory handling exposure levels. Refer to peer-reviewed literature for full pre-clinical data.

Section 12. Ecological information

No ecological data are available for this substance. Avoid release to the environment. Do not discharge to drains, watercourses, or soil. Peptides are generally biodegradable.

Section 13. Disposal considerations

Dispose of as biological / pharmaceutical research waste in accordance with local, regional, and national regulations. Used pens, needles, and contaminated packaging must be placed in approved sharps and clinical waste containers and routed to a licensed clinical waste handler. Do not dispose to general waste or sewer.

Section 14. Transport information

Not classified as a dangerous good for transport under ADR, IMDG, IATA, or RID. Ship refrigerated (2 to 8 °C) in validated cold-chain packaging. Include cold-chain breach indicator and temperature data logger as required.

Section 15. Regulatory information

EU regulation: This product is supplied as research reference material for in vitro laboratory use only. It is not a medicinal product within the meaning of Directive 2001/83/EC, and no marketing authorisation has been granted for human therapeutic use of Retatrutide in any jurisdiction at the date of this SDS.

REACH: not applicable to research-use-only laboratory chemicals supplied in quantities below the REACH registration threshold.

Other classifications: users are responsible for compliance with applicable national laws governing research peptides and biologically active substances in their jurisdiction.

Section 16. Other information

Abbreviations used in this document: CAS = Chemical Abstracts Service. CLP = Classification, Labelling and Packaging. GHS = Globally Harmonized System. REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals. GLP-1R = Glucagon-like peptide-1 receptor. GIPR = Glucose-dependent insulinotropic polypeptide receptor. GCGR = Glucagon receptor.

Document control: this Safety Data Sheet is issued by Nordic Bio. Version 1.0. Revisions are tracked on the Nordic Bio website and dispatched to active customers on update.

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