OLYMPUS PEPTIDE

PT-141

(Bremelanotide)

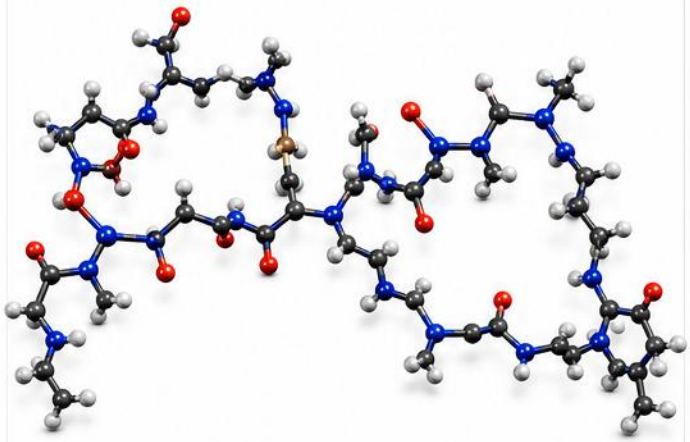
TECHNICAL INFORMATION SHEET

RESEARCH USE ONLY

PRODUCT NAME	PT-141 (Bremelanotide)
SYNONYMS	PT-141; Bremelanotide; Melanotan II Analogue
CAS NUMBER	189691-06-3
PEPTIDE CLASS	Melanocortin receptor agonist peptide
PEPTIDE LENGTH	12 amino acids
APPEARANCE	White to off-white lyophilized powder
SOLUBILITY	Soluble in Water for Injection (WFI), bacteriostatic water, or sterile saline
STORAGE (LYOPHILIZED)	2–8°C short-term; –20°C or below for long-term. Protect from light and moisture.
STORAGE (AFTER RECONSTITUTION)	2–8°C. Avoid repeated freeze–thaw cycles.

ILLUSTRATIVE 3-D MOLECULAR VISUALIZATION

Illustrative 3-D molecular visualization of PT-141 (Bremelanotide).



Carbon Hydrogen Nitrogen Oxygen

Illustrative 3-D molecular visualization of the PT-141 structure.

The model represents the chemical structure based on the amino acid sequence.

PEPTIDE BACKBONE SEQUENCE (ONE-LETTER CODE)

Sequence (12 amino acids)	Y K Q R K I G K K N N Q

Note: This is the peptide backbone sequence (one-letter code).
No post-translational modifications are present in PT-141.

COMPONENT SPECIFICATIONS

PARAMETER	SPECIFICATION
CAS Number	189691-06-3
Amino Acid Sequence (12 amino acids)	Tyr-Lys-Gln-Arg-Lys-Ile-Gly-Lys-Lys-Asn-Asn-Gln
One-Letter Sequence	YKQRKIGKKNNQ
Molecular Formula	$C_{56}H_{71}N_{13}O_8$
Molecular Weight	1024.22 g/mol

DESCRIPTION

PT-141 (Bremelanotide) is a synthetic 12-amino-acid peptide analogue of melanotan II. It is a selective agonist of melanocortin receptors, particularly MC3R and MC4R.

PT-141 has been investigated for its potential role in sexual function and arousal by acting on central pathways in the brain.

This peptide is supplied as a lyophilized powder for research use only.

KEY CHARACTERISTICS

- Melanocortin receptor agonist
- 12-amino-acid melanotan II analogue
- Supports investigation of sexual function and arousal mechanisms
- Supplied as a sterile lyophilized powder
- Highly water soluble
- Typically analyzed using HPLC and LC-MS
- Stable for long-term frozen storage when lyophilized

SCIENTIFIC NOTE

PT-141 (Bremelanotide) is a research peptide and is not approved as a therapeutic drug by the FDA or Health Canada. All use is restricted to laboratory research.

The information provided is for reference purposes only and is not intended for human or veterinary use.