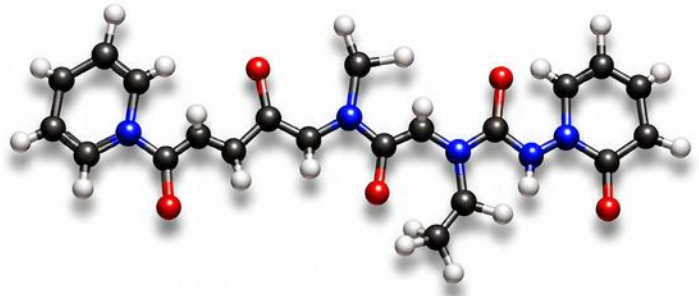




	PRODUCT NAME	SS-31 (Elamipretide)
	SYNONYMS	SS-31; Elamipretide; Bendavia®
	CAS NUMBER	1610630-07-9
	PEPTIDE CLASS	Mitochondria-targeting peptide
	PEPTIDE LENGTH	4 amino acids
	APPEARANCE	White to off-white lyophilized powder
	SOLUBILITY	Soluble in Water for Injection (WFI), bacteriostatic water, or 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. Use within 28 days. Avoid repeated freeze-thaw cycles.
	MOLECULAR WEIGHT	611.74 g/mol
	MOLECULAR FORMULA	C ₂₈ H ₄₇ N ₇ O ₈

ILLUSTRATIVE 3-D MOLECULAR VISUALIZATION

*Illustrative 3-D molecular visualization of SS-31
(Elamipretide) structure.*



● Carbon ● Hydrogen ● Nitrogen ● Oxygen

*The 3-D structure shown above is an illustrative representation
of SS-31 based on its amino acid sequence.
Actual conformation may vary in solution.*

PEPTIDE AMINO ACID SEQUENCE

Sequence (4 amino acids)

D – Arg – Dmt – Lys – Phe

One-Letter Sequence: R – U – K – F

Note: Dmt = 2,6-Dimethyltyrosine. This is the natural amino acid sequence of SS-31.
No post-translational modifications are present.

COMPONENT SPECIFICATIONS

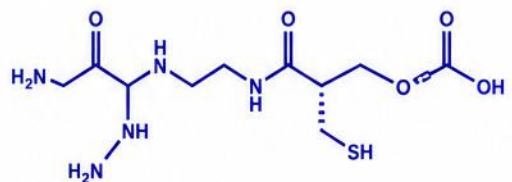
PARAMETER	SPECIFICATION
CAS Number	1610630-07-9
Amino Acid Sequence (4 amino acids)	D-Arg-Dmt-Lys-Phe
One-Letter Sequence	R U K F
Molecular Formula	C ₂₈ H ₄₇ N ₇ O ₈
Molecular Weight	611.74 g/mol
Purity (Typical)	≥ 98% (HPLC)
Appearance	White to off-white lyophilized powder
Solubility	Soluble in WFI, bacteriostatic water, or sterile saline
Identity (Typical)	Conforms to structure (HPLC / MS)



MOLECULAR WEIGHT: 611.74 g/mol.

This value is the sum of the individual amino acid molecular weights and is provided for reference only.
The compound is not a single chemical entity.

STRUCTURAL INFORMATION



2-D Structural Formula



DESCRIPTION

SS-31 (Elamipretide) is a mitochondria-targeting peptide composed of 4 amino acids.

It selectively accumulates in the inner mitochondrial membrane and binds cardiolipin, helping to stabilize mitochondrial structure and function.

SS-31 is widely used in laboratory research related to mitochondrial health, oxidative stress, and cellular bioenergetics.

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



KEY CHARACTERISTICS

- ✓ Mitochondria-targeting peptide
- ✓ Binds cardiolipin in the inner mitochondrial membrane
- ✓ Supports mitochondrial function and integrity in research models
- ✓ Research peptide for laboratory studies
- ✓ 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

SS-31 (Elamipretide) 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.

