



CERTIFICATE OF ANALYSIS

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA
Tel: (416) 665-9696, Fax: (416) 665-4439
Email: orders.trc@lgcgroup.com Website: www.trc-canada.com

1. Identification

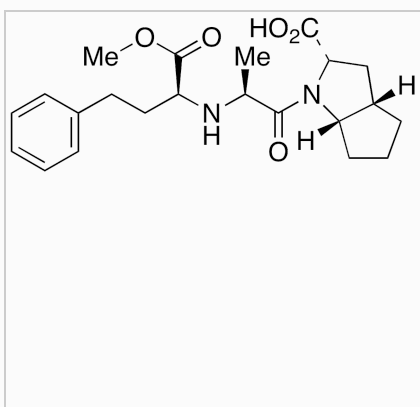
Catalogue Number: R111050

CAS Number: 108313-11-7

Product: Ramipril Methyl Ester

Synonym: (2S,3aS,6aS)-Octahydro-1-[(2S)-2-[(1S)-1-(methoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]cyclopenta[b]pyrrole-2-carboxylic Acid; [2S-[1[R*(R*)],2 α ,3 α ,6 α]]-Octahydro-1-[2-[[1-(methoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]cyclopenta[b]pyrrole-2-carboxylic Acid; USP Ramipril Related Compound A;

Structure:



Molecular Formula:

C₂₂H₃₀N₂O₅

Molecular weight:

402.49

Source of Product:

Synthetic

Solubility:

Aqueous Base (Slightly),
Methanol (Slightly), DCM,
Ethyl Acetate

Lot Number: 9-MBA-83-1

Purity: 95%

Shipping Condition: This Product Is Stable To Be
Shipped At Room Temperature

Storage Condition: -20°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	White to Off-White Solid	Off-White Solid
Water Content	Report Result	2.2% by Karl Fischer
Elemental Analysis	Conforms	%C: 61.23, %H: 7.46, %N: 6.30
MS	Conforms to Structure	Conforms
Specific Rotation	Report Result	+15.4° (c = 0.5, Methanol)
NMR	Conforms to Structure	Conforms

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm 2\%$. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Neha Khanna	Toni Rantanen	Chanell Chu	7/21/2021	7/19/2025
				