



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

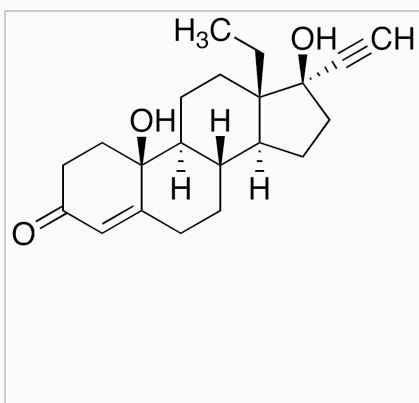
Catalogue Number: H825710

CAS Number: 21508-50-9

Product: 10b-Hydroxy D-(-)-Norgestrel

Synonym: 10?-Hydroxy Levonorgestrel; (17?)-13-Ethyl-10,17-dihydroxy-18,19-dinorpregn-4-en-20-yn-3-one; 13-Ethyl-10,17-dihydroxy-18,19-dinor-17?-pregn-4-en-20-yn-3-one; Levonorgestrel Impurity I (EP)

Structure:



Molecular Formula:

C₂₁H₂₈O₃

Molecular weight:

328.45

Source of Product:

Synthetic

Solubility:

Chloroform (Slightly, Heated, Sonicated), Ethyl Acetate (Slightly), Methanol (S)

Lot Number: 37-AZC-32-2

Purity: 97%

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:
Elemental Analysis	Conforms	%C: 77.25, %H: 8.66
NMR	Conforms to Structure	Conforms
Appearance	White to Off-White Solid	White Solid
MS	Conforms to Structure	Conforms
Specific Rotation	Report Result	-15.1° (c = 0.2, Chloroform)
HPLC Purity	Report Result	99.87% (235 nm)

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 ± 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
Swathi Reddy	Toni Rantanen	Chanell Chu	3/21/2022	3/19/2026