

## **CERTIFICATE OF ANALYSIS**

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## 1. Identification

**CAS Number:** 

Catalogue Number:

32419-58-2

TRC-E916950

**Product:** 

13-Ethyl-18,19-dinor-17α-pregn-4-en-20-yn-17-ol (~90%)

(Levo Norgestrel Impurity)

Synonyms:

(17α)-13-Ethyl-18,19-dinorpregn-4-en-20-yn-17-ol; Levonorgestrel Impurity D (EP); Levonorgestrel EP Impurity D

Structure:

**Molecular Formula:** 

C21H30O

**Molecular Weight:** 

298.46

**Source of Product:** 

Synthetic

## 2. Analytical Information

**Lot Number:** 

13-YKZ-71-1

**Melting Point:** 

N/A

**Appearance of Product:** 

Off-White Solid

**Method for Determining Identity:** 

<sup>1</sup>H NMR (CDCl<sub>3</sub>) and MS

**Purity:** 

~90%

**Atmosphere:** 

Air

Solubility

Chloroform (Slightly)

**Stability** 

Not Determined

**Long Term Storage Condition:** 

-20°C

**Shipping Condition** 

This Product Is Stable To Be Shipped At Room Temperature

## **Additional Information:**

TLC Conditions: SiO₂; Hexanes: Ethyl Acetate = 9:1; Visualized with AMCS and KMnO₄; Single Spot, Rf = 0.50.

<sup>1</sup>H NMR and MS conform to structure.

Elemental Analysis: (Found) %C: 82.77, %H: 10.09; (Calculated) %C: 84.51, %H: 10.13

Specific Rotation: -15.5° (c = 0.1, Chloroform)

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 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.

Philip Chan, Head of Quality Assurance

**QC Test Date** 

**Retest Date** July 2, 2021

July 4, 2017