

CERTIFICATE OF ANALYSIS

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1. Identification

Structure:

Catalogue Number: D292072 CAS Number: 1189981-81-4

Synonym: 4-[2-Hydroxy-3-[(1-

Product: O-Desmethyl Metoprolol-d5 methylethyl)amino]propoxy]-

benzeneethanol-d5;

Molecular Formula:

C14H18D5NO3

Molecular weight:

258.37

Source of Product:

Synthetic

Solubility:

Chloroform (Slightly), Ethyl

Acetate (Slightly)

Lot 4-RUS-45-1 Purity: 98%

Shipping This Product Is Stable To Be Shipped Storage

Condition: At Room Temperature

Condition: 4°C

2. Warning

Warning 1: Not Determined Warning 2: Warning 3:

3. Analytical Information

Tests: Specifications: Results:

Appearance White to Off-White Solid White to Off-White Solid

NMR Conforms to Structure Conforms
MS Conforms to Structure Conforms
Isotopic Purity >95% 98.7%

Specific Rotation Report Result -0.3° (c = 0.1, Chloroform)

Conforms %C: 64.90, %H: 9.03, %N: 5.30

Elemental Analysis: (Theoretical) %C: 65.08, %H: 8.98, %N:

Additional Information: 5.42Normalized Intensity: d0 = 0.00%, d1 = 0.01%, d2 = 0.02%, d3

= 0.04%, d4 = 6.24%, d5 = 93.69%

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 Test Date Retest Date

Henry Tieu Toni Rantanen My Nguyen 9/23/2020 9/21/2030

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