Certificate of Analysis

Product: dA^{bz} Phosphoramidite, (2.0g)

5'-dimethoxytrityl-(deoxyadenosine-N6 benzoyl)-3'-cyanoethyl diisopropyl phosphoramidite

 Part No.
 : 401159

 Lot No.
 : RF1162

 Chemical Formula
 : C₄₇H₅₂N₇O₇P

 Molecular Weight
 : 857.7

 CAS #
 : 98796-53-3

 Release Date
 : 21 Apr 2016

Appearance

Specification: The product should be a white to pale yellow amorphous powder free of foreign particulate material.

Result: Pass

Identity

Specification: Identity of each phosphoramidite lot is confirmed by reverse-phase HPLC against a control lot.

Result: dAbz Phosphoramidite

5'-dimethoxytrityl-(deoxyadenosine-N6 benzoyl)-3'-cyanoethyl diisopropyl phosphoramidite

<u>HPLC Analysis</u>

Each phosphoramidite lot is analyzed by reverse phase HPLC. Purity is the phosphoramidite peak area reported as a percent of the total area of the chromatogram.

Specification: >98.0% purity

Result: 100%

³¹P-NMR Analysis

Each bulk phosphoramidite lot is analyzed by phosphorous NMR. Purity is reported as a percent based on integrated peak areas.

Specification: >98.0% purity

Result: 100%

Solution Clarity

Each bulk phosphoramidite lot is dissolved in anhydrous acetonitrile (0.1 M) and visually inspected.

Specification: A clear liquid free of particulate precipitates

Result: Pass

Water Content

Each bulk phosphoramidite lot is analyzed for moisture content using the Karl Fischer method.

Specification: ≤0.40% moisture content

Result: 0.10%

Coupling Efficiency

The coupling efficiency is based on the synthesis of a proprietary sequence at the 0.2 µmol scale.

Specification: ≥98.0% standard average coupling efficiency Result: 99.1% standard average coupling efficiency

Approved by: h

Quality Assurance Manager



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