

Certificate of Analysis

Product : dA^{bz} Phosphoramidite, (2.0g)
5'-dimethoxytrityl-(deoxyadenosine-N6 benzoyl)-3'-cyanoethyl diisopropyl phosphoramidite
Part No. : 401159
Lot No. : RE0192
Chemical Formula : C₄₇H₅₂N₇O₇P
Molecular Weight : 857.7
CAS # : 98796-53-3
Release Date : 03 Mar 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: dA^{bz} Phosphoramidite
5'-dimethoxytrityl-(deoxyadenosine-N6 benzoyl)-3'-cyanoethyl diisopropyl phosphoramidite

HPLC Analysis

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: $\geq 98.0\%$ 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: $\geq 98.0\%$ 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: $\leq 0.40\%$ moisture content
Result: 0.00%

Coupling Efficiency

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

Specification: $\geq 98.0\%$ standard average coupling efficiency
Result: 98.7% standard average coupling efficiency

Approved by:



Quality Assurance Manager

AB Applied
Biosystems
an Applera Corporation Business

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