

Certificate of Analysis

Product : dG^{dmf} FastPhoramidite, (0.5g)
(N2-dimethylformamidine-5'-O-(4,4'-dimethoxytrityl)deoxyguanosine-3'-O-(2-cyanoethyl-N,N'-diisopropyl phosphoramidite)
Part No. : 401182
Lot No. : QA1602
Chemical Formula : C₄₃H₅₃N₈O₇P
Molecular Weight : 824.9
CAS # : 330628-04-1
Release Date : 01 Dec 2014

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: dG^{dmf} FastPhoramidite
N2-dimethylformamidine-5'-O-(4,4'-dimethoxytrityl)deoxyguanosine-3'-O-(2-cyanoethyl-N,N'-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: ≥98.0% purity

Result: 99.4%

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: 99.9%

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: 0.5%

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: 99.4% standard average coupling efficiency

WARRANTY STATEMENT

Every consumable product provided by Applied Biosystems is guaranteed to perform as specified for one year from the date of shipment, unless otherwise indicated on the product label. If you have a question, call your local Applied Biosystems Customer Service Representative for assistance.

Approved by:



Quality Assurance Manager

AB Applied
Biosystems
an Applied Biosystems Corporation Business

Notice: For Research Use Only. Not for use in diagnostic procedures.

903892 E