

Certificate of Analysis

Product: 5'-Ferrocene Phosphoramidite, 100 μmol

Chemical Name: [Ferrocene-3-carboxyamidohexyl]-1-O-(2-cyanoethyl)-N,N-diisopropyl-phosphoramidite

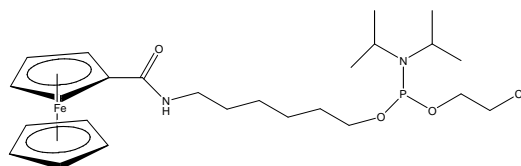
Formula: $\text{C}_{26}\text{H}_{40}\text{FeN}_3\text{O}_3\text{P}$, **MW:** 529.22

Part No. : HPT1003

Lot No. : 081716

Purity: 95%+

Release Date: 18 Aug. 2016



Diluent: Anhydrous Acetonitrile

For ABI 392/394, 100 $\mu\text{mol}/1\text{ mL}$, 0.25 g/2.96 mL; For Expedite & Beckman, 100 $\mu\text{mol}/1.5\text{ mL}$, 0.25 g/4.42 mL.

Coupling: 3 minute coupling time recommended

Deprotection: No changes needed from standard method recommended by synthesizer manufacturer

Storage: Freezer storage, -10 to -30°C, dry

Stability in Solution: 1-2 days, <90% efficient after 4 days

Labeled oligo storage: Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C. Do not store crude Ferrocene labeled oligonucleotides in ammonia

Test

Description:

Description: Yellow orange solid.

Result: PASS

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 chromatograph.

Specification: $\geq 95\%$

HPLC Purity: 99 %

¹H -NMR Analysis

Each phosphoramidite lot is analyzed by proton NMR and is confirmed of correct structure.

Result: PASS

Solution Clarity

Each phosphoramidite lot is dissolved in anhydrous acetonitrile (0.1M) and visually inspected to ensure clarity of the solution and absence of particulate precipitates.

Clarity: PASS

Approved by:

Quality Assurance Manager