

# Certification



**PRODUCT NAME:** dC  $\beta$ -Cyanoethyl Phosphoramidite  
**PRODUCT NUMBER:** 27-1732-14  
**LOT NUMBER:** SK2092  
**BULK NUMBER:** QL0115B  
**DESCRIPTION:** 5'-O-Dimethoxytrityl-N<sup>4</sup>-benzoyl-2'-deoxycytidine-3'-O-( $\beta$ -cyanoethyl-N,N-diisopropyl) phosphoramidite  
**CHEMICAL FORMULA:** C<sub>46</sub>H<sub>52</sub>N<sub>5</sub>O<sub>8</sub>P  
**FORMULA WEIGHT:** 833.93 g/mol  
**CAS NUMBER:** 102212-98-6  
**STORE:** -20°C  
**SHIP:** Ambient  
**DATE OF MANUFACTURE:** 12/14/2015  
**BULK RETEST DATE:** 06/16/2019

## ANALYSIS

| <u>Value</u>                  | <u>Specification</u>   | <u>Observed Value</u> |
|-------------------------------|--|-----------------------|
| Appearance                    | White to light yellow powder                                       | Pass                  |
| Solution Clarity              | 0.2M solution in acetonitrile is free from undissolved particulate | Pass                  |
| Purity by HPLC                | ≥ 98.0%  | 99.1%                 |
| Purity by <sup>31</sup> P NMR | ≥ 98.0%  | 98.8%                 |
| Water Content                 | ≤ 0.3%   | 0.0%                  |

## ORIGIN INFORMATION

Nucleoside source: This product may be produced using nucleosides derived from chemical synthesis and/or enzymatic synthesis or a blend of these sources.

No known animal-derived materials were used in the manufacture of this product.

Use of this product for the synthesis of polynucleotides may require a license from a third party. It is the responsibility of the purchaser of this product to determine the necessity of obtaining such a license and acquiring the same. No license is granted to the purchaser either directly, by implication, estoppel or otherwise.

## Revision 15