Certification

Thermo
S C I E N T I F I C

PRODUCT NAME: TheraPure® DMF dG Phosphoramidite
PRODUCT NUMBER: 27-1737-07
LOT NUMBER: TL0662
BULK NUMBER: TJ0195
DESCRIPTION: 5'-O-Dimethoxytrityl-
N^2(dimethylaminoformamidine)-2'-deoxyguanosine-3'-O-(β-cyanoethyl-N,N-diisopropyl) phosphoramidite
CHEMICAL FORMULA: $C_{43}H_{53}N_8O_7P$
FORMULA WEIGHT: 824.9 g/mol
CAS NUMBER: 330628-04-1
STORE: -20°C
SHIP: Ambient
DATE OF MANUFACTURE: 11/28/2018
BULK RETEST DATE: 05/31/2022

ANALYSIS

Value	Specification	Observed Value
Appearance	White to pale yellow powder	Pass
Appearance	Color intensity must not exceed Pantone #P1-4U or #P4-2U	Pass
Solution Clarity	0.2M solution in acetonitrile is free from undissolved particulate	Pass
HPLC Purity	$\geq$ 98.0%	99.1%
	Unknown single impurity ≤ 0.5%	Pass
	Non-critical single impurity: None > 1%	Pass
	Single critical impurity ≤ 0.5%	Pass
M-11 Impurity	≤ 0.01%	Pass
^{31}P NMR Purity	$\geq$ 98.0%	99.1%
	Sum of non-primary peaks at 140-152 ppm (PIII impurities) is $\leq$ 0.5 %	Pass
	No single impurity > 0.5% in the range of 140-152 ppm	Pass
	Sum of non-primary peaks at 5-35 ppm is ≤ 2.0%	Pass
	No peak(s) above 170 ppm	Pass
	Peak at ~146 ppm is ≤ 0.10%	Pass
Water Content	≤ 0.3% w/w	0.1%

Residual Solvent	≤ 3.0% total % by weight solvent residue	1.9%
Nucleoside Source	This product may be produced using nucleosides derived from chemical synthesis and/or enzymatic synthesis or a blend of these sources.	Pass
Material Origin (TSE/BSE)	No known animal-derived materials were used in the manufacture of this product	Pass

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

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