

Thermo Fisher Scientific (Milwaukee) LLC

2202 North Bartlett Avenue Milwaukee, WI 53202-1009 USA 1-877-886-7629 www.thermoscientific.com mke.csm@thermofisher.com

CERTIFICATE OF ANALYSIS

PRODUCT NAME:	dInosine β-Cyanoethyl Phosphoramidite	STRUCTURE
PRODUCT NUMBER:	27-1744-04	
LOT NUMBER:	ZE2512	N N
BULK NUMBER:	XK0055	
DESCRIPTION:	5'-O-Dimethoxytrityl-2'-Deoxyinosine-3'-O-(β-Cyanoethyl-	N N N
	N,N-Diisopropyl) phosphoramidite	
CHEMICAL FORMULA:	$C_{40}H_{47}N_6O_7P$, 9
MOLECULAR WEIGHT:	754.82 g/mol	N-P
CAS NUMBER:	141684-35-7	O CN
STORE:	-20°C]
SHIP:	Ambient	1
MANUFACTURE DATE:	12/29/2022	1
RETEST DATE:	07/01/2026	1
EXPIRATION DATE:	12/28/2026	

ANALYSIS RESULTS

Property	Specification Limits	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 clear and free from undissolved particulate	Pass
HPLC Purity	≥ 98.0%	98.2%
M-11 Impurity	≤ 0.01% (3'-O-lsopropyl-N,N-diisopropylphosphoramidite)	Pass
³¹ P NMR Purity	≥ 98%	100%
Water Content	≤ 0.3% w/w	0.1%
Average Coupling Efficiency	≥ 98.0%	99.3%
Material Origin (TSE/BSE)	No known animal-derived materials were used in the manufacture of this product	Pass

Phosphoramidites are sensitive to environmental conditions when in powder or liquid form. Take precautions to avoid potential precipitation, degradation or hydrolysis that can affect performance or delivery of the phosphoramidite during synthesis. Control temperature, humidity, and exposure time to air for both the phosphoramidite and diluent.

Gina Kogutkiewicz

QC Release By: Sr. Manager, Business Systems & Quality Compliance

R. hoznithis

QC Release Date: 11/16/2022

Revision 20