PerkinElmer Life and Analytical Sciences 549 Albany Street, Boston, MA 02118

Technical Data Certificate of Analysis

Caution: For Laboratory Use. A research chemical for research purposes only.

BIOTIN-11-ddATP NEL548

QUANTITY: 25 nmol

FORM: 25 µL solution **CONCENTRATION:** 1.0 mM

SOLVENT: 10 mM Tris-HCl, pH 7.6, 1 mM EDTA

ABSORPTION MAXIMUM: 280 nm

EXTINCTION COEFFICIENT: 12,700 M⁻¹cm⁻¹

280 nm (Phosphate buffer, pH 7)

INTRODUCTION

2',3'-dideoxynucleotide analogs are biologically active with a variety of DNA polymerases, and are $C_{30}H_{45}N_8O_{14}P_3S$ 866

chain terminators. Some analogs demonstrate variations in relative performance depending upon nucleotide and label (fluorophore or hapten) selected due to enzyme preferences. Dideoxynucleotide analogs may be used in a variety of applications which allow determination of a genetic profile based on single nucleotide polymorphisms (SNP). These analogs are intended to be detected either directly by their fluorescence when using a fluorescently labeled analog or indirectly when appropriately labeled antibodies or streptavidin are available. Indirect detection may be either colorimetric, chemi-luminescence, or fluorescence. Signal amplification may be obtained using NEN's patented Tyramide Signal Amplification process (TSĂ™). For additional information: call 1-800-762-4000 or visit our WEB site at http://www.perkinelmer.com/nucleotide analogs.

QUALITY CONTROL

The analog is purified by HPLC chromatography. Analytical HPLC is done to ensure initial purity is >95%. UV/VIS absorption spectra are obtained in aqueous phosphate buffer and used to determine concentration. Copies of representative spectra, labeling protocols, and information about TSATM are available from Technical Service at 1-800-551-2121 or visit our web site: http://www.perkinelmer.com.

STABILITY AND STORAGE CONDITIONS

Nucleotides labeled with fluorophores should be protected from extended exposure to light. nucleotide analogs are stable kept in a refrigerator or colder for at least 1 year. Minimizing freeze-thaw cycles and exposure to light are the most critical factors to consider for long term usage.

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²This product may not be used for DNA sequencing unless (a) used with a DNA sequencer instrument purchased from PerkinElmer LAS, Inc. or its sublicensees, or (b) a separate license for such use is obtained from Applied Biosystems, Inc., Foster City, CA.

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