INTRODUCTION

2',3'-dideoxynucleotide analogs are biologically active with a variety of DNA polymerases, and are 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 (TSA™). For additional information: call 1-800-762-4000 or visit our WEB site at http://las.perkinelmer.com

BIOTIN-11-ddUTP
Product Number: NEL547

QUANTITY: 25 nmol
FORM: 25 µL solution
CONCENTRATION: 1.0 mM
SOLVENT: 10 mM Tris-HCl, pH 7.6, 0.1 mM EDTA
FORMULA: C_{28}H_{43}N_6O_{16}P_3S \quad FW = 844
EXTINCTION COEFFICIENT: 13,000 M\(^{-1}\)cm\(^{-1}\)
(289 nm, Phosphate buffer, pH 7)

EXCITATION MAXIMUM: 289 nm
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 TSA™ are available from Technical Service at our web site: http://www.perkinelmer.com.

STABILITY AND STORAGE CONDITIONS

Nucleotides labeled with fluorophores should be protected from extended exposure to light. These 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.

For Research Use Only:

1This product or the use of this product may be covered by one or more patents owned by PerkinElmer LAS, Inc. including U.S. Patent Nos. 5,047,519; 5,151,507; 5,558,991, and 5,608,063. Those products incorporating a cyanine dye are covered under the following issued US Patent Nos. 114,350, 6197, 956, 6,204,389, and 6,224,644 on the cyanine dye precursors, uses, and labeled moieties.

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.

3The use of this product for primer extension may be covered by one or more of the following US patents (or their foreign counterparts) – 5,888,819, 5,952,174, 6,004,744, 6,013,431 and to the extent covered may not be used unless a separate license for such use is obtained from Beckman Coulter, Inc. of Fullerton, Ca.