Dye Labeled Nucleotides

Fluorescein-12-ddATP
Product Number: NEL402

QUANTITY: 25 nmol
FORM: 25 µL solution
CONCENTRATION: 1.0 mM
SOLVENT: 10 mM Tris-HCl, pH 7.6, 1 mM EDTA
FORMULA: C_{41}H_{41}N_{6}O_{18}P_{3}  FW = 998
EXTINCTION COEFFICIENT: 30,000 M^{-1}cm^{-1}
(496 nm, Phosphate buffer, pH = 7)

INTRODUCTION

Fluorescent 2',3'-dideoxynucleotide analogs are biologically active with a variety of DNA polymerases. Since dideoxynucleotides are chain terminators, they result in the analog being extended in a base specific manner onto the 3'-end of the DNA chain. Dideoxynucleotide analogs may be used in a variety of applications which allow determination of a genetic profile based on single nucleotide polymorphisms (SNP). Analogs labeled with a fluorophore are intended to be detected directly by their fluorescence properties. For additional information: call 1-800-762-4000 or visit our WEB site at http://las.perkinelmer.com
QUALITY CONTROL

The nucleotide analog is purified by HPLC chromatography. Analytical HPLC is used as a quality control check to ensure chemical purity >95%. UV/VIS absorption spectra are obtained in aqueous phosphate buffer to determine concentration. Relative fluorescence quantum yields are not necessarily the same for the four different base nucleotide analogs.

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 most critical factors to consider for long term usage.

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