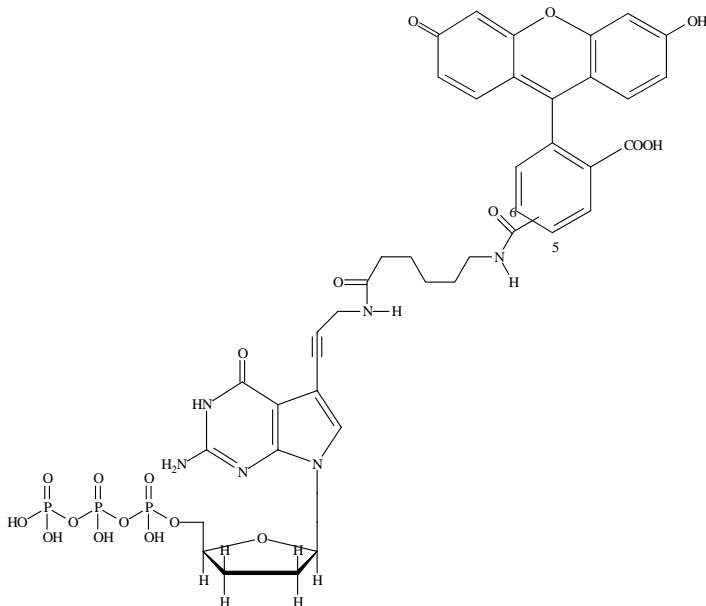


**Fluorescein-12-ddGTP**  
**NEL403**



**QUANTITY:** 25 nmol  
**FORM:** 25  $\mu$ L solution  
**CONCENTRATION:** 1.0 mM  
**SOLVENT:** 10 mM Tris-HCl, pH 7.6, 1 mM EDTA  
**FORMULA:** C<sub>41</sub>H<sub>41</sub>N<sub>6</sub>O<sub>19</sub>P<sub>3</sub> **FW** = 1014  
**COLOR:** U/C analogs more yellow than A/G  
**EXTINCTION COEFFICIENT:** 30,000 M<sup>-1</sup>cm<sup>-1</sup>  
 (497 nm, Phosphate buffer, pH = 7)

**INTRODUCTION**

Fluorescent 2', 3'-dideoxynucleotide analogs<sup>1,3</sup> 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)<sup>2</sup>. 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://www.perkinelmer.com/nucleotide\\_analogs](http://www.perkinelmer.com/nucleotide_analogs).**

**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**

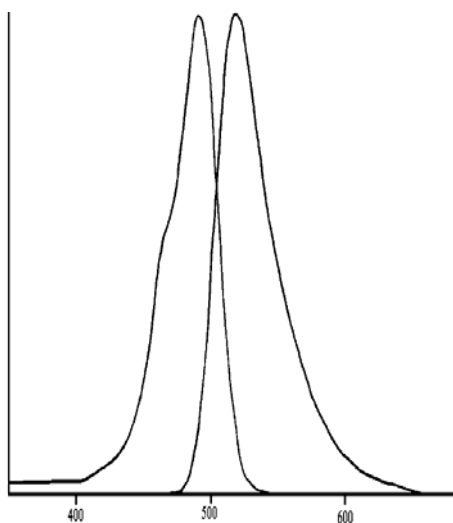
Nucleotides labeled with fluorophores should be protected from extended exposure to light. These nucleotide analogs are stable kept in a refrigerator or colder for at least 1 year. Minimizing freeze-thaw cycles and exposure to light are most critical factors to consider for long term usage.

**For Research Use Only:**

<sup>1</sup>This 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.

<sup>2</sup>This 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.

<sup>3</sup>The 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.



**WAVELENGTH:** EXCITATION 497nm  
 (Maxima) EMISSION 517nm