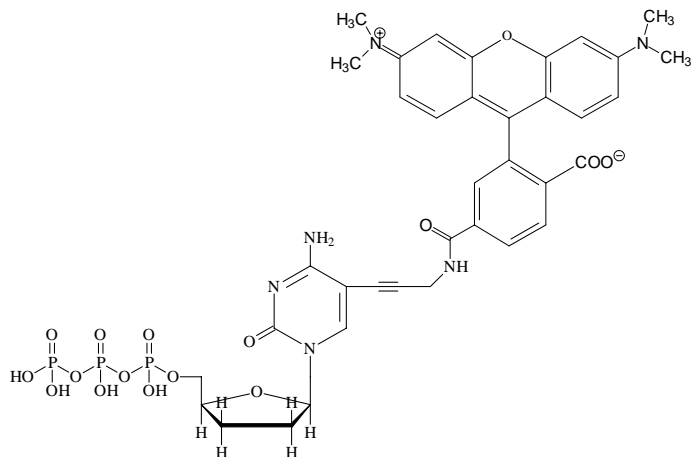
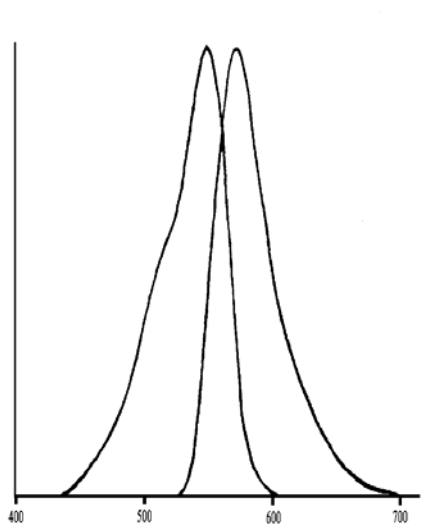


**TAMRA-ddCTP  
NEL473**



**QUANTITY:** 2.5 nmol  
**FORM:** 25  $\mu$ L solution  
**CONCENTRATION:** 0.1 mM  
**SOLVENT:** 10 mM Tris-HCl, pH 7.6, 0.1 mM EDTA  
**FORMULA:** C<sub>37</sub>H<sub>39</sub>N<sub>6</sub>O<sub>16</sub>P<sub>3</sub> **FW = 916**  
**COLOR:** All four bases similar color  
**EXTINCTION COEFFICIENT:** 91,000 M<sup>-1</sup>cm<sup>-1</sup>  
 (552 nm, Phosphate buffer, pH >9)



**WAVELENGTH:** EXCITATION 552nm  
 (Maxima) EMISSION 575nm

**INTRODUCTION**

Fluorescent dideoxynucleotide analogs<sup>1,2,3</sup> are 3'-end chain terminators used for DNA sequencing, RFLP mapping, DNA fingerprinting, and point mutation screening analysis. Labeled DNA patterns may be obtained by either separating labeled fragments using standard polyacrylamide gel electrophoresis techniques or with primer/template coated microarrays using 96-well microplates or glass slides as solid supports. Detection is via the direct fluorescence of the nucleotide analog using classical excitation/emission or when using two fluorescent dyes in combination via fluorescence resonance energy transfer (FRET). These analogs are available with a variety of fluorophores attached to each of the four dideoxynucleotides to permit maximum assay flexibility. **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 and isomeric 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. The use of this product in SNP analysis by the method of TDI-FP as defined under WU patent 6,440,707 is not permitted.