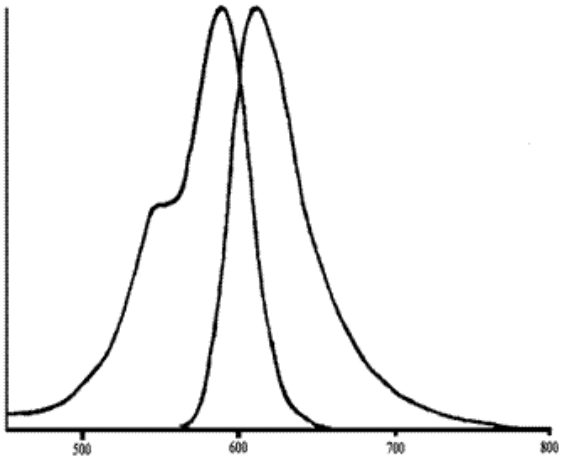
Texas Red®-5-dUTP

Product Number: NEL417001EA

QUANTITY: 25 nmol
FORM: 25 µL solution
CONCENTRATION: 1.0 mM
SOLVENT: 10 mM Tris-HCl, pH 7.6, 1 mM EDTA
FORMULA: $C_{43}H_{46}N_5O_{20}P_3S_2$ **FW =** 1109.9
EXTINCTION COEFFICIENT: 85,000 $M^{-1}cm^{-1}$
(593 nm, Phosphate buffer, pH = 7)



EXCITATION MAXIMUM: 593 nm
EMISSION MAXIMUM: 612 nm

INTRODUCTION

Fluorescent nucleotide analogs[1,3] are biologically active with a variety of DNA and/or RNA polymerases. Labeling methods such as: nick translation, random priming, polymerase chain reaction, 3'-end labeling, or transcription of RNA using SP6, T3, or T7 RNA polymerases may be used. Some analogs demonstrate variations in relative performance depending upon nucleotide and fluorophore selected due to enzyme preferences. Labeled probes may be used in applications including (but not limited to) chromosome mapping[2]. These analogs are intended to be detected directly by their fluorescence properties.

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.

NEL417001EA-R REV01

Revvity, Inc.
940 Winter Street
Waltham, MA 02451 USA
(800) 762-4000
www.revvity.com