

## CERTIFICATE OF ANALYSIS

# Fluorescein-12-dUTP, molecular biology grade

Fluorescein-6-carboxaminocaproyl-[5-(3-aminoallyl)-2'-deoxyuridine-5'-triphosphate]

**#R0101**      25 nmol

**Lot:**                      **Expiry Date:**

Concentration:      1 mM  
Volume:              25  $\mu$ l  
Formula:              C<sub>39</sub>H<sub>41</sub>N<sub>4</sub>O<sub>21</sub>P<sub>3</sub>  
Molecular Weight: 994.7

**Store at -20°C in the dark**

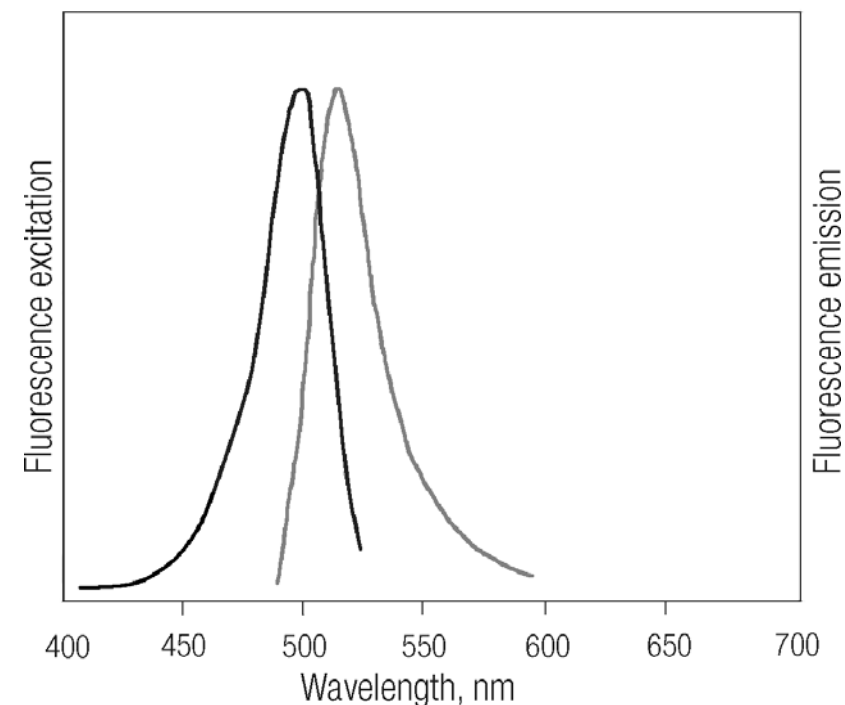
In total 1 vial.

## General Characteristics

$\lambda_{\text{max}}$  = 495 nm,  $\epsilon$  = 70.0 x 10<sup>3</sup> (pH 9.0).

Excitation maximum at 495 nm;

Emission maximum at 520 nm (pH 9.0).



**Fig.1.** Normalized excitation-emission spectra of Fluorescein-12-dUTP.

## ***Applications***

- Fluorescein-labeled probes can be used for *in situ* hybridization with direct fluorescence detection.
- Fluorescein-12-dUTP can be used for enzymatic non-radioactive labeling of DNA in PCR, nick translation or cDNA synthesis reactions. This modified nucleotide can be incorporated in DNA using:
  - *E.coli* DNA Polymerase I (holoenzyme, Klenow or Klenow exo<sup>-</sup> fragment),
  - Reverse Transcriptases (RevertAid™ M-MuLV or RevertAid™ H Minus M-MuLV)
  - *Taq* DNA Polymerase.

## **QUALITY CONTROL ASSAY DATA**

- Functionally tested in cDNA synthesis with RevertAid™ H Minus M-MuLV Reverse Transcriptase.
- Purity of >90% by HPLC.
- Endo-, exodeoxyribonucleases and ribonucleases free.

**Quality authorized by:**



Jurgita Zilinskiene

### **PRODUCT USE LIMITATION.**

This product is developed, designed and sold exclusively *for research purposes and in vitro use only*. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

Please refer to [www.fermentas.com](http://www.fermentas.com) for Material Safety Data Sheet of the product.