

CERTIFICATE OF ANALYSIS

Fluorescein-12-dUTP, molecular biology grade

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

#R0101 25nmol

Lot:

Concentration: 1mM
Volume: 25 μ l
Formula: C₃₉H₄₁N₄O₂₁P₃
Molecular Weight: 994.7

Store at -20°C in the dark

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In total 1 vial.

General Characteristics

λ_{\max} = 495nm, ϵ = 70.0x10³ (pH 9.0).

Excitation maximum at 495nm;

Emission maximum at 520nm (pH 9.0).

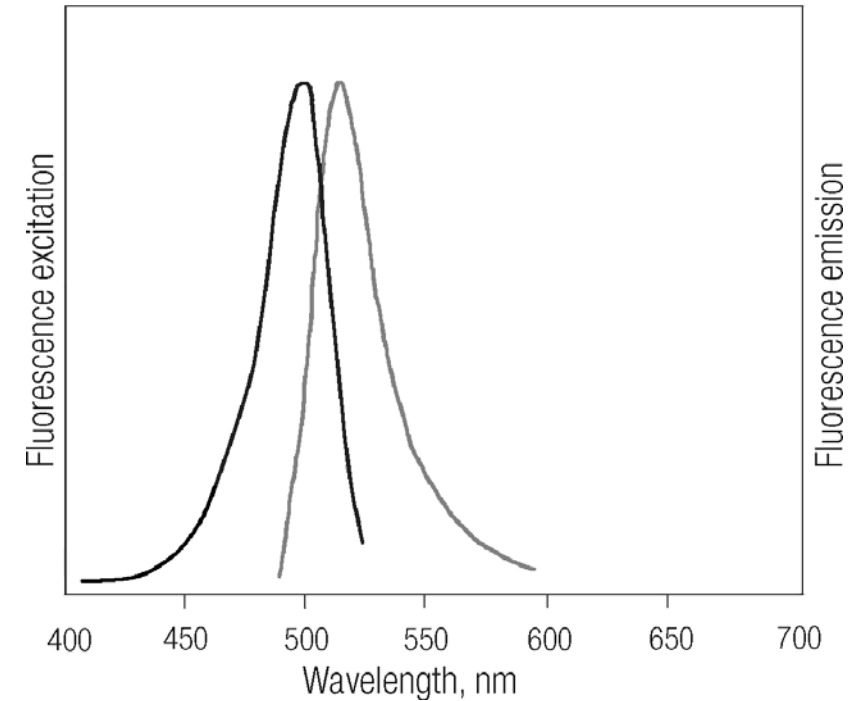


Fig.1. Normalized excitation-emission spectra of Fluorescein-12-dUTP.

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⁻ 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, ribonucleases and phosphatases 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 for Material Safety Data Sheet of the product.