

Data Sheet (16.06.2017)

Cy5-dUTP

Aminoallyl-dUTP - Cy5

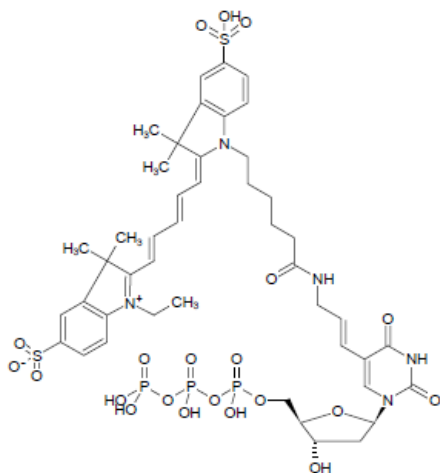
Cat.-No.	Amount.	Conc.
mi-N1307S-CY5	10 µl	1 mM
mi-N1307L-CY5	5 x 10 µl	1 mM

For research use only! Only for in vitro use!

mi-Cy5-dUTP

1 mM 5-(3-aminoallyl)-2'-deoxy-uridine-5'-triphosphate labeled with Cy5, triethylammonium salt

Structure

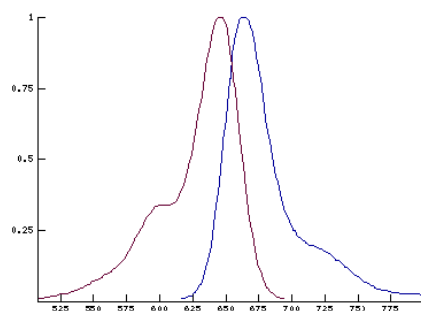


Spectroscopic data

Excitation maximum: Ex = 643 nm

Emission maximum: Em = 667 nm

Extinction coefficient: 250,000 cm⁻¹ M⁻¹



Cy5 excitation and emission spectra

Description

Cy5-dUTP is recommended for direct enzymatic labeling of DNA. The dye-dUTP is specially optimized for incorporation into DNA by PCR using *Taq* Polymerase.

In PCR labeling, repeated cycles of denaturation, annealing and extension allow the amplification of a specific DNA fragment. When dTTP is partially substituted by dye-dUTP a fluorescent labeled doublestranded DNA is generated.

The resultant DNA is suited for application in FISH, microarray gene expression profiling and other nucleic acid hybridization assays.

Recommended concentrations in PCR

Component	Final conc.
dATP; dCTP; dGTP;	100 µM each
dTTP	80 µM
Cy5-dUTP	20 µM ¹⁾
forward Primer	500 nM
reverse Primer	500 nM
Template DNA	5-500 pg/ µl

1) The optimal final concentration of the labeled nucleotide may vary depending on the application.

pH: 7,5 ± 0,5

Purity (HPLC): ≥ 95 %

Storage conditions: - 20 ± 5°C (dark)