

Data Sheet (16.06.2017)

Rhodamine-12-dUTP

Rhodamine-X-5-Aminoallyl-dUTP

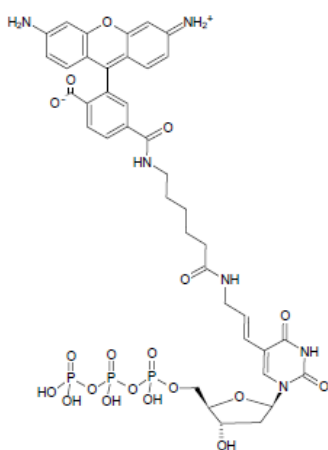
Cat.-No.	Amount.	Conc.
mi-N1303S-RHO	10 µl	1 mM
mi-N1303L-RHO	5 x 10 µl	1 mM

For research use only! Only for in vitro use!

mi-Rhodamine12-dUTP

1 mM 5-(3-aminoallyl)-2'-deoxy-uridine-5'-triphosphate labeled with 5(6)-carboxyfluorescein, triethylammonium salt

Structure

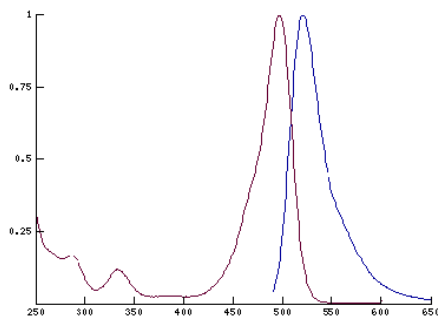


Spectroscopic data

Excitation maximum: Ex = 496 nm

Emission maximum: Em = 520 nm

Extinction coefficient: 85,000 cm⁻¹ M⁻¹



5(6)-carboxyrhodamine 110 excitation and emission spectra

Description

Rhodamine110X-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	50 µM
Rhodamine110X-dUTP	50 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)