

Data Sheet (06.08.2010)

Rhodamine110X-dUTP

Fluorescent labeled aminoallyl-dUTP

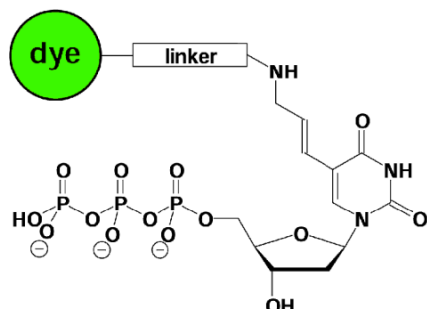
| Cat.-No. | Amount. | Conc. |
|---------------|---------|-------|
| mi-N1303S-RHO | 10 µl | 1 mM |
| mi-N1303L-RHO | 50 µl | 1 mM |

Only for *in vitro* use!
For research only!

mi-Rhodamine110X-dUTP

1 mM 5-(3-aminoallyl)-2'-deoxy-uridine-5'-triphosphate labeled with 5(6)-carboxyfluorescein, triethylammonium salt, pH 7.5, purity >95 %

Structure



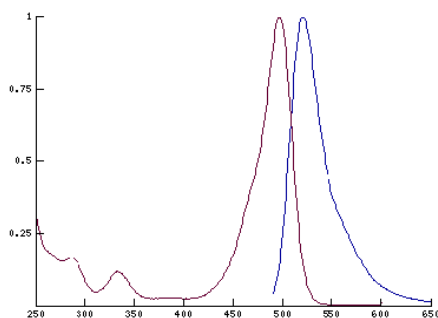
Rhodamine-dUTP, the dye is attached via an optimized linker to aminoallyl-dUTP

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.

Carry out experimental procedures in low light conditions.

Store at -20 °C in the dark

Avoid frequent thawing and freezing

Under these storage conditions, a guarantee of 12 months after delivery is given.