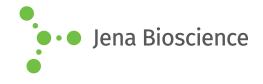
DATA SHEET

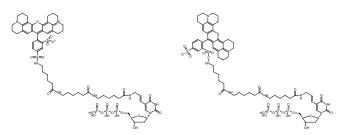




Aminoallyl-dUTP-XX-Texas Red

5-(3-Aminoallyl)-2'-deoxyuridine-5'-triphosphate, labeled with Texas Red, Triethylammonium salt

Cat. No.	Amount
NU-803-XX-TXR-S	10 μl (1 mM)
NU-803-XX-TXR-L	5 x 10 μl (1 mM)



Structural formula of Aminoallyl-dUTP-XX-Texas Red

For general laboratory use.

Shipping: shipped on gel packs **Storage Conditions:** store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery

Molecular Formula: C₆₁H₈₁N₈O₂₃P₃S₂ (free acid)

Molecular Weight: 1451.39 g/mol (free acid)

Exact Mass: 1450.41 g/mol (free acid)

Purity: ≥ 95 % (HPLC)

Form: filtered solution (30 kDa) in 10 mM Tris-HCl

Color: red-violet

Concentration: 1.0 mM - 1.1 mM

pH: 7.5 ±0.5

Spectroscopic Properties: λ_{exc} 588 nm, λ_{em} 609 nm,

ε 80.0 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)

Applications:

Incorporation into DNA/cDNA by

- PCR with *Taq* polymerase in-house data
- Nick Translation with DNAse I/ DNA Polymerase I $^{\rm in-house\ data}$

Description:

Aminoallyl-dUTP-XX-Texas Red is recommended for direct enzymatic labeling of DNA/cDNA e.g. by PCR and Nick Translation. It is incorporated as substitute for its natural counterpart dTTP. The resulting Dye-labeled DNA/cDNA probes are ideally suited for fluorescence hybridization applications such as FISH or microarray-based gene expression profiling.Optimal substrate properties and thus labeling efficiency is ensured by an optimized linker attached to the C5 position of uridine.

Recommended Aminoallyl-dUTP-XX-Texas $\operatorname{Red}/\operatorname{dTTP}$ ratio for PCR and Nick Translation:

20-30% Aminoallyl-dUTP-XX-Texas Red/ 80-70% dTTP (PCR), 50% Aminoallyl-dUTP-XX-Texas Red/ 50% dTTP (Nick Translation)

Please note: Protect the Dye-labeled dUTP from exposure to light and carry out experimental procedures in low light conditions. The optimal final concentration of the Dye-labeled dUTP may very depending on the application and assay conditions. For optimal product yields and high incorporation rates an individual optimization of the Dye-labeled-dUTP/dTTP ratio is recommended.