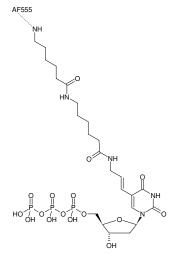




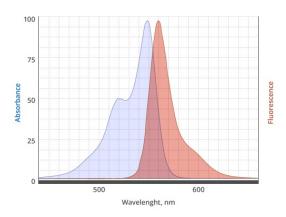
■ Aminoallyl-dUTP-XX-AF555

5-(3-Aminoallyl)-2'-deoxyuridine-5'-triphosphate, labeled with AF555, Triethylammonium salt

Cat. No.	Amount
NU-803-XX-AF555-S	10 μl (1 mM)
NU-803-XX-AF555-L	5 x 10 μl (1 mM)



Structural formula of Aminoallyl-dUTP-XX-AF555



excitation and emission spectrum of AF555

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: $C_{24}H_{41}N_5O_{16}P_3$ - AF555(free acid)

Molecular Weight: 1577.50 g/mol (free acid)

Purity: ≥ 95 % (HPLC)

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

Color: pink

Concentration: 1.0 mM - 1.1 mM

pH: 7.5 ±0.5

Spectroscopic Properties: λ_{exc} 555 nm, λ_{em} 572 nm,

 ϵ 155.0 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-AF555 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. AF555 (structural analog to Alexa Fluor 555®) is a hydrophilic dye with excellent photostability compared to fluorescein.

Recommended Aminoallyl-dUTP-XX-AF555/dTTP ratio for PCR and Nick Translation: 30-50% Aminoallyl-dUTP-XX-AF555/ 70-50% dTTP

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.

DATA SHEET





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Related Products:

HighFidelity AF555 PCR Labeling Kit, #APP-101-AF555 HighFidelity YELLOW PCR Labeling Kit, #APP-101-YELLOW AF555 NT Labeling Kit, #PP-305-AF555