

## Product Information

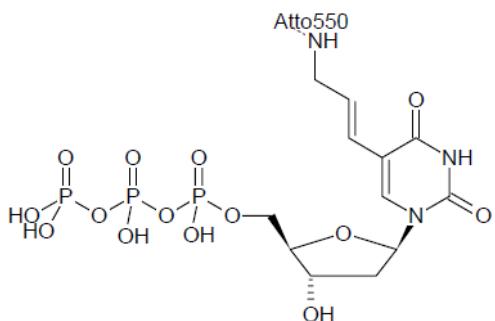
### 30387 Aminoallyl-dUTP-Atto 550 triethylammonium salt solution

**Description:**

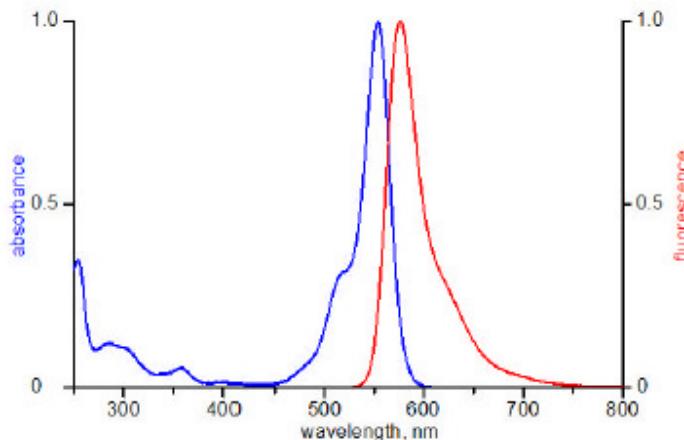
Aminoallyl-dUTP-Atto 550 is recommended for direct enzymatic labeling of DNA/cDNA by Nick Translation. It is incorporated as substitute for its natural counterpart dTTP. The resulting Dye-labeled DNA/cDNA probes are ideally suited for fluorescence hybridization applications such as FISH or microarray-based 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-Atto 550/dTTP ratio for Nick Translation:  
50% Aminoallyl-dUTP-Atto 550/ 50% dTTP

Molecular Formula: C<sub>12</sub>H<sub>20</sub>N<sub>3</sub>O<sub>14</sub>P<sub>3</sub> - Atto 550 (free acid)  
Molecular Weight: 1099.22 g/mol (free acid)  
Form: sterile clear aqueous solution  
in 10 mM Tris-HCl pH 7.5 +/-0.5  
Concentration: 1 mM  
pH: 7.5 +/-0.5  
Spectroscopic Properties:  $\lambda_{\text{exc}} 554 \text{ nm}$ ;  $\lambda_{\text{em}} 576 \text{ nm}$ ;  
 $\epsilon 120.0 \text{ L mmol}^{-1} \text{ cm}^{-1}$  (Tris-HCl pH 7.5)  
Package quantity: 10  $\mu\text{L}$



Structural formula of Aminoallyl-dUTP - Atto-550



excitation and emission spectrum of Atto 550

**Applications:**

Incorporation into DNA/cDNA by

- Nick Translation with DNase I/ DNA Polymerase I unpublished results

**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 vary 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.

**Storage Conditions:** store at -20 °C, protect from light

**Precautions and Disclaimer:**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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