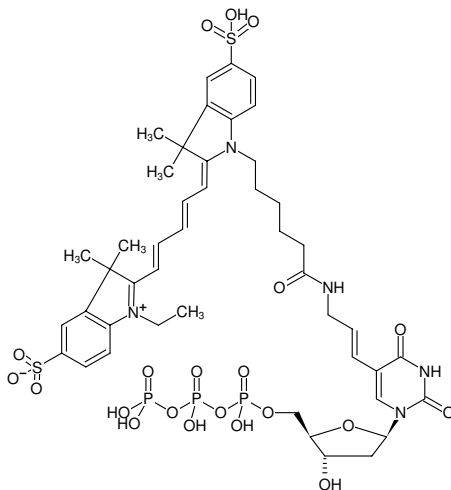




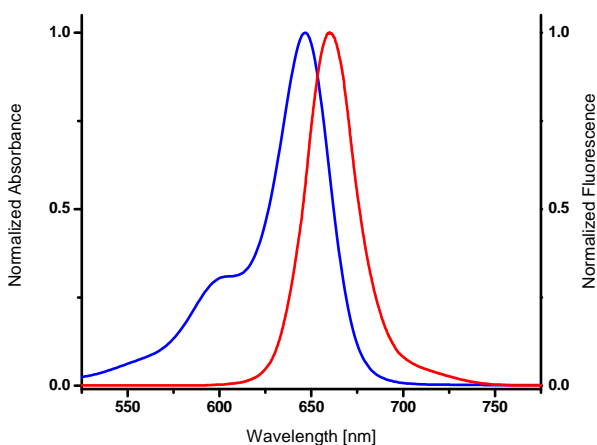
## Aminoallyl-dUTP-Cy5

5-(3-Aminoallyl)-2'-deoxyuridine-5'-triphosphate, labeled with Cy5, Triethylammonium salt

Cat. No.	Amount
NU-803-CY5-S	10 µl (1 mM)
NU-803-CY5-L	5 x 10 µl (1 mM)



Structural formula of Aminoallyl-dUTP-Cy5



excitation and emission spectrum of Cy5

### For research use only!

**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<sub>45</sub>H<sub>58</sub>N<sub>5</sub>O<sub>21</sub>P<sub>3</sub>S<sub>2</sub> (free acid)

**Molecular Weight:** 1162.01 g/mol (free acid)

**Exact Mass:** 1161.23 g/mol (free acid)

**Purity:** ≥ 95 % (HPLC)

**Form:** sterile solution in 10 mM Tris-HCl

**Color:** blue

**Concentration:** 1.0 mM - 1.1 mM

**pH:** 7.5 ± 0.5

**Spectroscopic Properties:** λ<sub>exc</sub> 649 nm, λ<sub>em</sub> 670 nm, ε 250.0 L mmol<sup>-1</sup> cm<sup>-1</sup> (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 in-house data

### Description:

Aminoallyl-dUTP-Cy5 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-Cy5/dTTP ratio for PCR and Nick Translation: 30-50% Aminoallyl-dUTP-Cy5/ 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 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.*