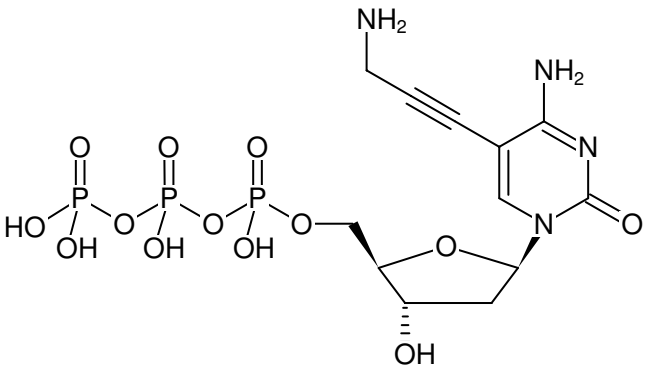
DATA SHEET

Jena Bioscience

5-Propargylamino-dCTP - Solution

5-Propargylamino-2'-deoxycytidine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-809S	10 µl (100 mM)
NU-809L	5 x 10 µl (100 mM)
NU-809XL	100 µl (100 mM)



Structural formula of 5-Propargylamino-dCTP - Solution

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: $C_{12}H_{19}N_4O_{13}P_3$ (free acid)

Molecular Weight: 520.22 g/mol (free acid)

Exact Mass: 520.02 g/mol (free acid)

CAS#: 115899-39-3

Purity: ≥ 93 % (HPLC)

Form: solution in water

Color: slightly yellow

Concentration: 100 mM - 110 mM

pH: 7.5 ±0.5

Spectroscopic Properties: λ_{max} 294 nm, ε 9.3 L mmol^{-1} cm^{-1} (Tris-HCl pH 7.5)

Applications:
Incorporation into DNA by
- PCR with *Taq* polymerase[in-house data]

Description:
Propargylamino-dCTP is recommended for two-step labeling of DNA e.g. by PCR. It is enzymatically incorporated into DNA as substitute for its natural counterpart dCTP. The resulting Amine-functionalized DNA can subsequently be labeled via the classic Amine/NHS Ester reaction that offers the choice
- to introduce a Biotin group (via NHS Ester of Biotin) for subsequent purification tasks
- to introduce fluorescent group (via NHS Ester of fluorescent dyes) for subsequent microscopic imaging