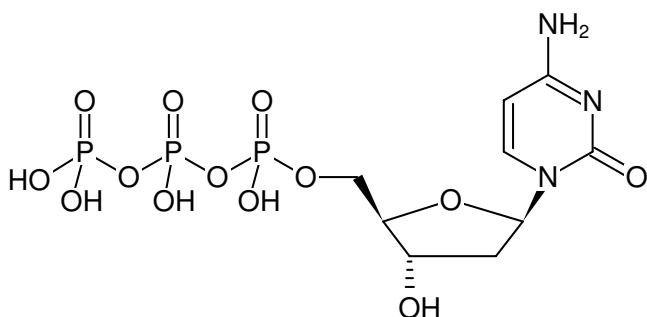



**dCTP - Lithium salt solution**

2'-Deoxycytidine-5'-triphosphate, Lithium salt

Cat. No.	Amount
DCTP_LI_100ML	100 ml (100 mM)



Structural formula of dCTP - Lithium salt solution

**For in vitro use only!**
**Shipping:** shipped on blue ice

**Storage Conditions:** store at -20 °C

**Additional Storage Conditions:** Short term exposure (up to 1 week cumulative) to ambient temperature possible.

**Shelf Life:** 24 months from certification date

**Molecular Formula:** C<sub>9</sub>H<sub>16</sub>N<sub>3</sub>O<sub>13</sub>P<sub>3</sub> (free acid)

**Molecular Weight:** 467.15 g/mol (free acid)

**Purity:** ≥ 99.0 % (HPLC)

**Form:** clear aqueous solution

**Concentration:** 100 mM - 110 mM

**pH:** 8.5 ± 0.2 (22 °C)

**Spectroscopic Properties:** λ<sub>max</sub> 272 nm, ε 8.9 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5)

**Description:**

dCTP, PCR-grade is supplied as ultrapure aqueous solution (pH 8.5) and suitable for all molecular biology applications including PCR/qPCR, reverse transcription, DNA labeling and DNA sequencing.

**Quality Control Specifications:**

 Low Copy Long Range PCR (18 kb, lambda DNA, template dilution series): PCR fragment with 50 pg of template or less  
 RT-PCR (749 bp fragment, human GAPDH gene, template dilution series): PCR fragment with 10 pg of template or less  
 Contamination with bacterial or human DNA: not detectable  
 DNases, RNases, Nicking Activity: not detectable  
 Proteases: not detectable

**Selected References:**

- Holland *et al.* (1991) Detection of specific polymerase chain reaction product by utilizing the 5'→3' exonuclease activity of *Thermus aquaticus* DNA polymerase. *Proc. Natl. Acad. Sci. USA* **88** (16):7276.
- Erllich *et al.* (1988) Primer-directed enzymatic amplification of DNA with a thermostable DNA polymerase. *Science* **29** (239):487.
- Sanger *et al.* (1977) DNA sequencing with chain-terminating inhibitors. *Proc. Natl. Acad. Sci. USA* **74**:5463.