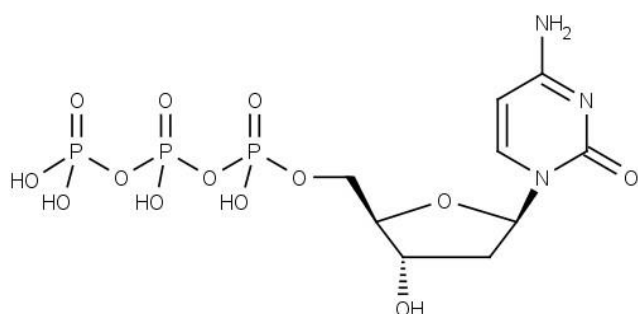


# dCTP

## 2'-Deoxycytidine 5'-triphosphate, 100 mM lithium salt solution

	Cat. No.	Volume	Amount
	DCTP_LI_100ML	100 ml	10 mmol
	DCTP_LI_1000ML	1000 ml	100 mmol



For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -20°C, short term (up to one week) exposure to ambient temperature possible

### Concentration

100-110 mM

### Form

clear aqueous solution

### pH

8.5 ± 0.2 (22 °C)

### Purity

≥ 99 % (HPLC)

### 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 (free acid)

### Absorbance

absorbance max: 272 nm (pH 7)

ε at absorbance max: 8.9 l·mmol<sup>-1</sup>·cm<sup>-1</sup>

### 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

### 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.

### Selected References

[1] Erlich *et al.* (1988) Primer-directed enzymatic amplification of DNA with a thermostable DNA polymerase. *Science* **29** (239):487.

[2] Gelfand *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.

[3] Sanger *et al.* (1977) DNA sequencing with chain-terminating inhibitors. *Proc. Natl. Acad. Sci. USA* **74**:5463.