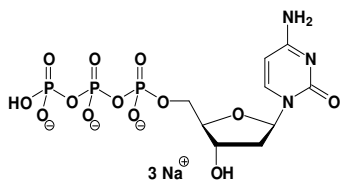


DATA SHEET
dCTP, PCR Grade
2'-Deoxycytidine 5'-triphosphate, 100 mM sodium salt solution

Cat.-No.	Volume	Amount	Conc.
NU-1002	1 ml	100 μ mol	100 mM

Description	dCTP, PCR Grade is supplied as ultrapure aqueous solution and suitable for all molecular biology applications including PCR/qPCR, reverse transcription, DNA labeling and DNA sequencing.
CAS Number	102783-51-7
Formula (Anion)	$C_9H_{13}N_3O_{13}P_3$
Molecular Weight	$464.13 \text{ g}\cdot\text{mol}^{-1}$
Storage	Store at -20°C , short term (up to one week) exposure to ambient temperature possible
Stability	Quality guaranteed for 12 months
Structure	

Biophysical Specifications

Appearance	clear aqueous solution
Concentration (22°C, pH 7.0)	100-110 mM ($A_{271 \text{ nm}}$, $\epsilon = 8.9 \text{ l}\cdot\text{mmol}^{-1}\cdot\text{cm}^{-1}$)
$A_{250 \text{ nm}} / A_{260 \text{ nm}}$ (22°C, pH 7.0)	0.82 ± 0.02
$A_{280 \text{ nm}} / A_{260 \text{ nm}}$ (22°C, pH 7.0)	0.97 ± 0.02
$A_{290 \text{ nm}} / A_{260 \text{ nm}}$ (22°C, pH 7.0)	0.30 ± 0.02
pH (4°C)	8.5 ± 0.1
Purity (HPLC area)	dCTP $\geq 99.0\%$ dCDT $\leq 0.9\%$ dCMP $\leq 0.5\%$

Functional Specifications

Low Copy Long Range PCR (18 kb, lambda DNA, template dilution series)	PCR fragment with 100 pg of template or less
RT-PCR (600 bp fragment, human GAPDH gene)	PCR fragment with 100 pg of template or less
Contamination with bacterial or human DNA	not detectable
DNases, RNases, Nicking Activity	not detectable
Proteases	not detectable