Celltechgen
For Research Only

Product information

The Celltechgen™CTP (Cytidine 5'-triphosphate, sodium salt) (100 mM)

Cat.No.CTG-MT0012	CTP (100 mM)，250 ul	ISSUE DATE July 9, 2019

Concentration	100mM
Volume	0.25mL
Amount	25umol;
Fomula	$C_9H_{13}N_3O_{14}P_3Na_3$
Melecular weight	549.1 (acid form: 483.1)
Store at -20°C	

For Research Use Only. Not for use in diagnostic procedures

Description

100 mM aqueous solution of CTP (cytidine 5'-triphosphate), titrated to 7.3-7.5 with NaOH.

General characteristics

λmax=271 nm,
ε=9.0×103 M-1 cm-1 (pH 7.0)

CERTIFICATE OF ANALYSIS

Purity is ≥99%, determined by HPLC.

Concentration is 100±3 mM for each of NTP is determined spectrophotometrically in potassium phosphate buffer (pH 7.0) using a molar absorption coefficient of 9.0 mM-1cm-1 at 271 nm.

pH is 7.3-7.5, determined according to Ph. Eur. 2.2.3

Quality authorized by:

Frank Zeng,

Ph.D Production ManagerCelltechgen LLC

Endo- and exonucleases.

Incubation of single stranded and double stranded radiolabeled oligonucleotides with 1 µL of 100 mM CTP for 4 hours at 37 °C, separation on denaturing polyacrylamide gel and phosphoimaging did not detect DNA degradation.

Ribonucleases.

Incubation of 2,000 bases RNA transcript with 1 µL of 100 mM CTP at 37 °C for 4 hours and separation on agarose gel resulted in no decrease in RNA transcript band intensity compared to control.

***In vitro* transcription assay.**

Incubation of 1 µg of pTZ102R DNA/Ecl136II DNA template with 10 mM of each of NTP and 2 µL of Thermo ScientificTM TranscriptAidTM enzyme mix in 1X TranscriptAid reaction buffer for 2 hours at 37 °C generated ≥25 µg of single stranded RNA product of 100 bases.

PRODUCT USE LIMITATION

This product is developed, designed and sold exclusively *for research purposes and in vitro use only.* The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals. Please refer to www.celltechgen.com for Material Safety Data Sheet of the product.