

Certificate of Analysis



Compound Name	Cytidine 5'-triphosphate (CTP), 100 mM sodium salt solution
CAS Number	36051-68-0
Catalog Number	CTP_100ML CTP_1000ML
Lot Number	101.627
Formula	C₉H₁₃N₃O₁₄P₃
Formula Weight	480.13 g/mol
Storage	at -20°C
Stability	24 months from Certification Date

	Test	Specification	Results
Biophysical	Appearance	clear colorless solution	conforms
	Concentration ⁽¹⁾ (A _{271 nm} , 22 °C, pH 7.0, ε = 8.9 l x mmol ⁻¹ x cm ⁻¹)	100 mM ± 2%	98 mM
	A _{250 nm} / A _{260 nm} (22 °C, pH 7.0)	0.82 ± 0.02	0.84
	A _{280 nm} / A _{260 nm} (22 °C, pH 7.0)	0.97 ± 0.02	0.97
	A _{290 nm} / A _{260 nm} (22 °C, pH 7.0)	0.30 ± 0.02	0.32
	pH (4 °C)	8.0 ± 0.2	8.2
HPLC	CTP (C18-RP-UV, 271 nm)	≥ 99.0% (area)	99.2%
	CDP (C18-RP-UV, 271 nm)	≤ 1.0% (area)	0.3%
Functional	in vitro Transcription (T7 RNA polymerase, 1423 bp template)	visible RNA fragment after 5 min incubation	conforms
	DNases, RNases, Nicking Activity (FRET)	not detectable	conforms
	Proteases (UV-Vis)	not detectable	conforms

Certification Date: 2018, February 01

Steffi Lange, Quality Control