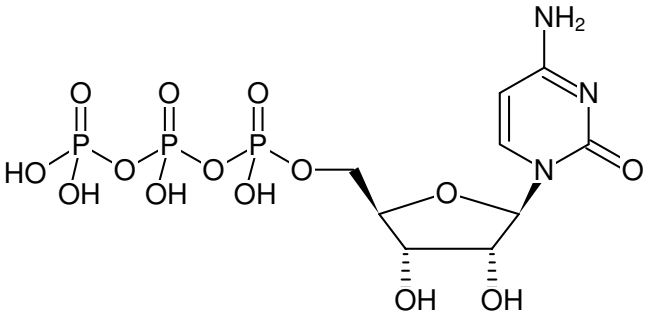
DATA SHEET

LAROVA
The Nucleotide Company

CTP - Solution

Cytidine-5'-triphosphate, Sodium salt

Cat. No.	Amount
CTP_1ML	1 ml (100 mM)
CTP_10ML	10 ml (100 mM)
CTP_100ML	100 ml (100 mM)
CTP_200ML	200 ml (100 mM)



Structural formula of CTP - 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: 12 months

Molecular Formula: $C_9H_{16}N_3O_{14}P_3$ (free acid)

Molecular Weight: 483.16 g/mol (free acid)

CAS#: 36051-68-0

EC number: 252-849-3

Purity: ≥ 99.0 % (HPLC)

Form: clear aqueous solution

Concentration: 100 mM ±2 %

pH: 8.0 ±0.2 (22 °C)

Spectroscopic Properties: λ_{max} 271 nm, ε 8.9 L mmol^{-1} cm^{-1} (Tris-HCl pH 7.0)

Applications:
Physiological role in coronary artery disease[1]

Physiolocal role in lipid metabolism[2]

Physiological role in farnesol induced apoptosis[3]

Specific Ligands:

CTP synthase[4]

Phosphocholine cytidyltransferase alpha[2]

Ligand for purinergic receptors:
$P2Y_6$[5]
$P2X_3$[6]

Quality Control Specifications:
in vitro transcription (T7 RNA polymerase): visible RNA fragments after 5 min incubation, DNases, RNases, Nicking Activity: not detectable, Proteases: not detectable

Selected References:

[1] Lui *et al.* (2010) Evaluation of CT perfusion in setting of cerebral ischemia:patterns and pitfalls. *American Journal of Neuroradiology* **31**:1552.

[2] Luoma (2010) Gene activation regresses artheriosclerosis, promotes health, and enhances longevity. *Lipids in health and disease* **9**:67.

[3] Joo *et al.* (2010) Molecular mechanisms involved in farnesol-induced apotosis. *Cancer letters* **287**:123.

[4] Cabeen *et al.* (2010) A metabolic assembly line in bacteria. *Nature Cell Biology* **12**:731.

[5]Jayasekara *et al.* (2013) 4-Alkoxyimino-cytosine nucleotides: tethering approaches to molecular probes for the P2Y6 receptor. MedChemComm. **4 (8)**:1156.

[6]Garzia-Guzman *et al.* (1997) Molecular characterization and pharmacological properties of the human P2X3 purinoreceptor. *Mol. Brain Res.* **47 (1)**:59.

Spangler *et al.* (2011) Interaction of the diguanylate cyclase YdeH of Escherichia coli with 2', (3')-substituted purine and pyrimidine nucleotides. *J. Pharmacol. Exp. Ther.* **336 (1)**:234.