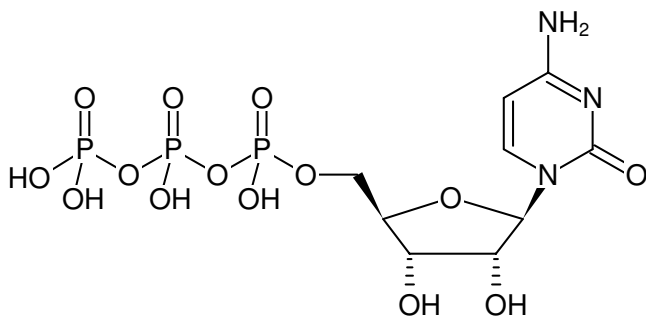




## CTP - Solution

100 mM Sodium salt solution  
Cytidine 5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1011	1 ml (100 mM)
NU-1011-100ML	100 ml (100 mM)



Structural formula of CTP - Solution

### For general laboratory use.

**Shipping:** shipped on gel packs

**Storage Conditions:** store at -20 °C

**Shelf Life:** 12 months

**Molecular Formula:** C<sub>9</sub>H<sub>16</sub>N<sub>3</sub>O<sub>14</sub>P<sub>3</sub> (free acid)

**Molecular Weight:** 483.16 g/mol (free acid)

**CAS#:** 36051-68-0

**EC number:** 252-849-3

**Purity:** ≥ 99 % (HPLC)

**Form:** clear aqueous solution

**Concentration:** 100 mM ± 2 %

**pH:** 8.0 ± 0.2 (22 °C)

**Spectroscopic Properties:** λ<sub>max</sub> 271 nm, ε 8.9 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.0)

### Applications:

Physiological role in coronary artery disease<sup>[1]</sup>

Physiological role in lipid metabolism<sup>[2]</sup>

Physiological role in farnesol induced apoptosis<sup>[3]</sup>

### Description:

Ultrapure CTP supplied as clear aqueous solution.

### Specific Ligands:

CTP synthase<sup>[4]</sup>

Phosphocholine cytidyltransferase alpha<sup>[2]</sup>

Ligand for purinergic receptors:

P2Y<sub>6</sub><sup>[5]</sup>  
P2X<sub>3</sub><sup>[6]</sup>

### 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 arteriosclerosis, promotes health, and enhances longevity. *Lipids in health and disease* **9**:67.
- [3] Joo *et al.* (2010) Molecular mechanisms involved in farnesol-induced apoptosis. *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 P2Y<sub>6</sub> receptor. *MedChemComm.* **4** (8):1156.
- [6] Garzia-Guzman *et al.* (1997) Molecular characterization and pharmacological properties of the human P2X<sub>3</sub> 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.