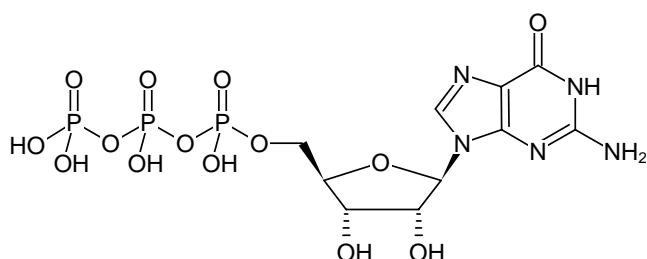


**GTP - solution**

100 mM

Guanosine 5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1012	1 ml (100 µmol)



Structural formula of GTP - solution

For in vitro use only!**Shipping:** shipped on blue ice**Storage Conditions:** store at -20 °C**Shelf Life:** 12 months**Molecular Formula:** C₁₀H₁₆N₅O₁₄P₃ (free acid)**Molecular Weight:** 523.18 g/mol (free acid)**CAS#:** 36051-31-7**Purity:** > 99 % (HPLC)**Form:** clear aqueous solution, pH 8.0 ±0.2 (4 °C)**Concentration:** 100 mM ±2 %**pH:** 8.0 ±0.2**Spectroscopic Properties:** λ_{max} 252 nm; ε 14.2 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.0)**Applications:**Assembly of ribosomal units^[1]Microdomain formation by small GTPases^[2]Antiviral activity of large GTPases (dynamin superfamily)^[3]Regulation of exocytosis by Rho GTPases^[4]Mechanism of hydrolysis by ADP-ribosylation factors^[5]**Description:**

Ultrapure GTP supplied as clear aqueous solution (pH 8.0).

Specific Ligands:Guanylate binding proteins^[6]Yeast septins^[7]**Quality Control Specifications:** in vitro transcription: suitable; contamination with bacterial and human DNA: not detectable; activity of DNase, Protease or Phosphatase: not detectable**Selected References:**

- [1] Blombach *et al.* (2011) Assembling the archeal ribosome: roles for transition factor-related GTPases. *Biochemical Society Transactions* **39**:45.
- [2] Stuermer (2011) Microdomain-forming proteins and the role of the reggies/flottilins during axon regeneration in zebrafish. *Biochimica Biophysica Acta, Molecular Basis of Disease* **1812**:415.
- [3] Haller *et al.* (2011) Human MxA protein: An Interferon-induced Dynamin-like GTPase with broad antiviral activity. *J. Interferon and Cytokine Research* **31**:79.
- [4] Stephane *et al.* (2011) Rho GTPases and exocytosis: what are the molecular links? *Seminars in Cell and Developmental Biology* **22**:27.
- [5] East *et al.* (2011) Models for the function of Arf GAPs. *Seminars in Cell and Developmental Biology* **22**:3.
- [6] Vestal *et al.* (2011) The guanylate binding proteins: Emerging insights into the biochemical properties and functions of this family of large interferon-induced guanosine triphosphatase. *J. Interferon and Cytokine Research* **31**:89.
- [7] Younghoon *et al.* (2011) Septin structure and function in yeast and beyond. *Trends in Cell Biology* **21**:141.

Drummond *et al.* (2011) Reconstitution and Organization of Escherichia coli Proto-ring Elements (FtsZ and FtsA) inside Giant Unilamellar Vesicles Obtained from Bacterial Inner Membranes. *Methods Mol. Biol.* **777**:29.Katsuki *et al.* (2011) Preparation of dual-color polarity-marked fluorescent



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100 mM

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microtubule seeds. *Methods Mol. Biol.* **777**:117.

Ramachandran *et al.* (2009) Membrane Insertion of the Pleckstrin Homology Domain Variable Loop 1 Is Critical for Dynamin-catalyzed Vesicle Scission. *Molecular Biology of the Cell* **20** (22):4630.