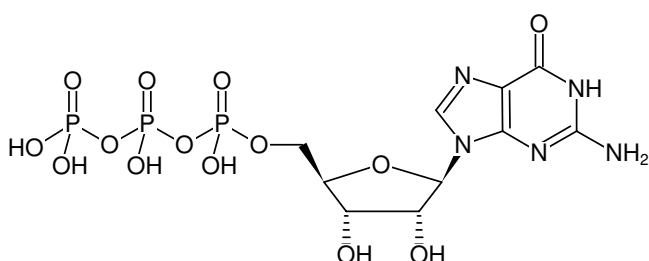




## GTP - Solution

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

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



Structural formula of GTP - Solution

### For general laboratory use.

**Shipping:** shipped on gel packs

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

Short term exposure (up to 1 week cumulative) to ambient temperature possible. If stored as recommended, Jena Bioscience guarantees optimal performance of this product for 12 months after date of delivery.

**Shelf Life:** 12 months

**Molecular Formula:** C<sub>10</sub>H<sub>16</sub>N<sub>5</sub>O<sub>14</sub>P<sub>3</sub> (free acid)

**Molecular Weight:** 523.18 g/mol (free acid)

**CAS#:** 36051-31-7

**Purity:** ≥ 99 % (HPLC)

**Form:** clear aqueous solution

**Concentration:** 100 mM ± 2 %

**pH:** 8.0 ± 0.2 (22 °C)

**Spectroscopic Properties:** λ<sub>max</sub> 252 nm, ε 14.2 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.0)

### Applications:

Assembly of ribosomal units<sup>[1]</sup>

Microdomain formation by small GTPases<sup>[2]</sup>

Antiviral activity of large GTPases (dynamin superfamily)<sup>[3]</sup>

Regulation of exocytosis by Rho GTPases<sup>[4]</sup>

Mechanism of hydrolysis by ADP-ribosylation factors<sup>[5]</sup>

### Description:

Ultrapure GTP supplied as clear aqueous solution.

### Specific Ligands:

Guanylate binding proteins<sup>[6]</sup>

Yeast septins<sup>[7]</sup>

### 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 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.