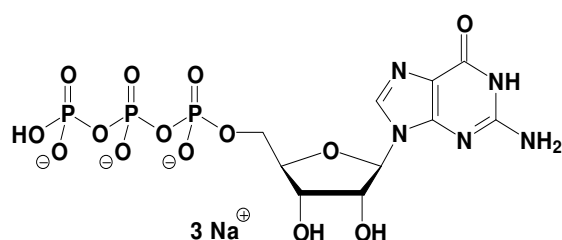


GTP

Guanosine 5'-Triphosphate, 100 mM sodium salt solution

	Cat. No.	Volume	Concentration
	GTP_100ML	100 ml	100 mM
	GTP_1000ML	1000 ml	100 mM



Structural formula of GTP - Solution

For *in vitro* use only!

Shipping: shipped on blue ice

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: C₁₀H₁₃N₅O₁₄P₃ (Anion)

Molecular Weight: 520.15 g/mol (Anion)

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_{max} 252 nm; ε 14.2 L mmol⁻¹ cm⁻¹ (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.

Specific Ligands:

Guanylate binding proteins^[6]

Yeast septins^[7]

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.

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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.