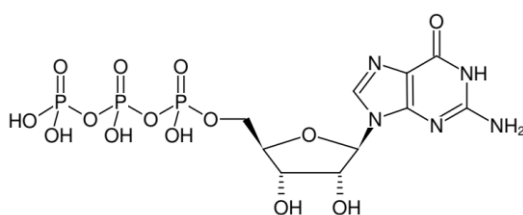


DATA SHEET

**GTP Solid (>90%)**

Guanosine - 5' - triphosphate, Sodium salt

Cat. Nº.	Amount
<input type="checkbox"/> NUC-2055	1 g
<input type="checkbox"/> NUC-205M	10 g
<input type="checkbox"/> NUC-205L	100 g



Structural formula of GTP Solid

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:C₁₀H₁₆N₅O₁₄P₃ (free acid)**Molecular Weight:**

523,18 g/mol (free acid)

Exact Mass:

522,99 g/mol (free acid)

CAS#:

56001-37-7

Purity:

≥ 90 % (HPLC)

Form:

lyophilised

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]**Specific Ligands:**Guanylate binding proteins^[6]Yeast septins^[7]**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] 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/flotillins 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.