DATA SHEET

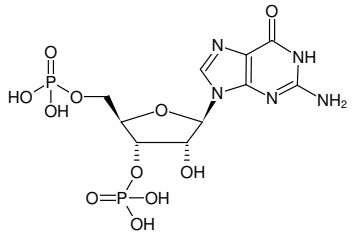
Jena Bioscience

Guanosine-3',5'-bisphosphate

(pGp)

Guanosine-3',5'-bisphosphate, Triethylammonium salt

Cat. No.	Amount
NU-1107S	100 µl (10 mM)
NU-1107L	5 x 100 µl (10 mM)



Structural formula of Guanosine-3',5'-bisphosphate

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.

Shelf Life: 12 months after date of delivery

Molecular Formula: $C_{10}H_{15}N_5O_{11}P_2$ (free acid)

Molecular Weight: 443.20 g/mol (free acid)

Exact Mass: 443.02 g/mol (free acid)

Purity: ≥ 95 % (HPLC)

Form: solution in water

Color: colorless to slightly yellow

Concentration: 10 mM - 11 mM

pH: 7.5 ±0.5

Spectroscopic Properties: λ_{max} 252 nm, ε 13.7 L mmol^{-1} cm^{-1} (Tris-HCl pH 7.5)

Selected References:

Kvint *et al.* (2000) Emergency derepression: stringency allows RNA polymerase to override negative control by an active repressor. *Mol. Microbiol.* **35 (2)**:435.

Acharya *et al.* (1999) The transmission of the electronic character of guanin-9-yl drives the sugar-phosphate backbone torsions in guanosine 3 ',5 '-bisphosphate. *Angew. Chem. Int. Edit.* **38 (24)**:3645.

Ishikawa *et al.* (1996) Crystal structure of ribonuclease T1 carboxymethylated at Glu58 in complex with 2'-GMP. *Biochemistry-US* **35 (25)**:8329.

Atgie *et al.* (1993) Specific decrease of mitochondrial thermogenic capacity in brown adipose-tissue of obese SHR/N-CP rats. *Am. J. Physiol.* **265 (6)**:c1674 Part 1.

Lenz *et al.* (1993) 3-dimensional structure of the ternary complex between Ribonuclease-T1, guanosine-3',5'-bisphosphate and inorganic-phosphate at 0.19 nm resolution. *Eur. J. Biochem.* **211 (1-2)**:311.

Lenz *et al.* (1991) X-ray-analysis of cubic-crystals of the complex formed between Ribonuclease-T1 and guanosine-3',5'- bisphosphate. *Acta Crystallogr.* B **47**:521.

Plesner (1984) Guanosine 3',5'-diphosphate is found in the medium of eukaryotic cells during G1 to S-phase transition. *H-S Z. Physiol. Chem.* **365 (6)**:608.