Data sheet

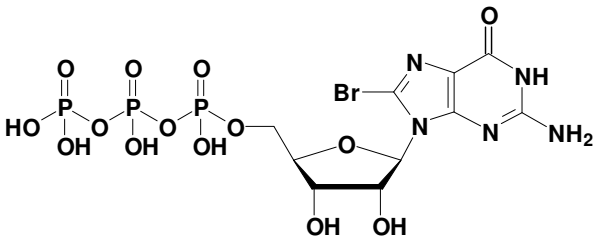
IFTA AG
Certified QMS according to
DIN EN ISO 9001
Reg. No. IC 03214 034

Jena Bioscience

8Br-GTP

8-Bromo-guanosine-5′-triphosphate, Sodium salt

Cat. No.	Amount
NU-118S	50 Units
NU-118L	250 Units



Cat. No.: NU-118

Molecular Formula: $C_{10}H_{15}N_5O_{14}P_3Br$ (free acid)

Molecular Weight: 602.07 (free acid)

Purity: > 95%, clear aqueous solution, pH 7.5

Storage conditions:
Short term exposure (up to 1 week cumulative) to ambient temperature possible. Long term storage at < -20°C. If stored as recommended, Jena Bioscience guarantees optimal performance of this product for 12 months after date of delivery.

For research use only!

1 unit = 1 µl of a 10 mM solution

Applications:

- Inhibition of RNA triphosphatases[1]
- Inhibition of GTP-hydrolases[2]
- Conformational studies on syn-anti dynamics of GTP[3]

Specific Ligands:

- Yeast RNA triphosphates[1]
- Cytoskeletal protein FtsZ and tubulin[2, 4]

Selected References:

[1] Issur *et al.* (2009) Nucleotide analogs and molecular modeling studies reveal key interactions involved in substrate recognition by the yeast RNA triphosphatase. *Nucleic Acid Res.* **37**:3714.

[2] Läppchen *et al.* (2005) GTP Analogue Inhibits Polymerization and GTPase Activity of the Bacterial Protein FtsZ without Affecting Its Eukaryotic Homologue Tubulin. *Biochemistry* **44 (21)**:7879.

[3] Hritz and Oostenbrink (2008) Hamiltonian replica exchange molecular dynamics using soft-core interactions. *J. Chemical Phys.* **128**:144121/1.

[4] Laeppchen *et al.* (2008) Probing FtsZ and tubulin with C8-substituted GTP analogs reveals differences in their nucleotide binding sites. *Chemistry and Biology* **15**:189.

Labesse *et al.* (2010) Structural and functional characterization of the Mycobacterium tuberculosis uridine monophosphate kinase: insights into the allosteric regulation. *Nucleic Acids Res.*