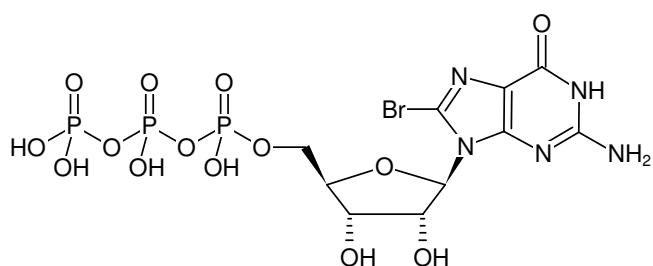


**8-Bromo-GTP**

(8Br-GTP)

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

Cat. No.	Amount
NU-118S	50 µl (10 mM)
NU-118L	5 x 50 µl (10 mM)



Structural formula of 8-Bromo-GTP

**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<sub>10</sub>H<sub>15</sub>N<sub>5</sub>O<sub>14</sub>P<sub>3</sub>Br (free acid)**Molecular Weight:** 602.08 g/mol (free acid)**Exact Mass:** 600.90 g/mol (free acid)**CAS#:** 23197-98-0**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<sub>max</sub> 259 nm, ε 14.0 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5)**Applications:**Inhibition of RNA triphosphatases<sup>[1]</sup>Inhibition of GTP-hydrolases<sup>[2]</sup>Conformational studies on syn-anti dynamics of GTP<sup>[3]</sup>**Specific Ligands:**Yeast RNA triphosphates<sup>[1]</sup>Cytoskeletal protein FtsZ and tubulin<sup>[2, 4]</sup>**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.

Gilles Labesse *et al.* (2011) Structural and functional characterization of the Mycobacterium tuberculosis uridine monophosphate kinase: insights into the allosteric regulation. *Nucleic Acids Res.* **39** (8):3458.