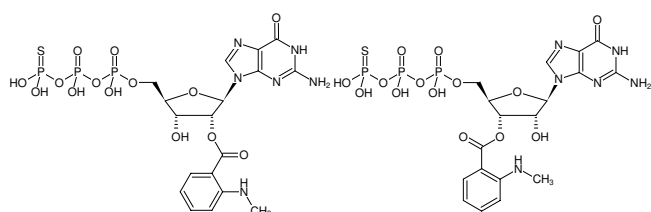




## Mant-GTPyS

2'/3'-O-(N-Methyl-anthraniloyl)-guanosine-5'-(γ-thio)-triphosphate, Triethylammonium salt

Cat. No.	Amount
NU-209S	10 µl (10 mM)
NU-209L	5 x 10 µl (10 mM)



Structural formula of Mant-GTPyS

### For research use only!

**Shipping:** shipped on dry ice

**Storage Conditions:** store at -20 °C

**Shelf Life:** 6 months after date of delivery

**Molecular Formula:** C<sub>18</sub>H<sub>23</sub>N<sub>6</sub>O<sub>14</sub>P<sub>3</sub>S (free acid)

**Molecular Weight:** 672.39 g/mol (free acid)

**Exact Mass:** 672.02 g/mol (free acid)

**CAS#:** 136749-24-1, 136749-26-3

**Purity:** ≥ 90 % (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> 252/355 nm, ε 22.6/5.7 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5), λ<sub>exc</sub> 355 nm, λ<sub>em</sub> 448 nm

### Applications:

Inhibition of AC5<sup>[1]</sup>, ACs<sup>[2]</sup>

### Specific Ligands:

Initiation factor eIF5B<sup>[3]</sup>

### Selected References:

[1] Rottlaender *et al.* (2007) Functional adenylyl cyclase inhibition in murine cardiomyocytes by 2 (3)-O- (N-methylanthraniloyl)-guanosine 5- (gamma-thio) triphosphate. *J. Pharmacol. Exper. Ther.* **321**:608.

[2] Gille *et al.* (2003) Mant-substituted guanine nucleotides: A novel class of potent adenylyl cyclase inhibitors. *Life Sciences* **74**:271.

[3] Pisareva *et al.* (2007) Kinetic analysis of the interaction of guanine nucleotides with eukaryotic translation initiation factor eIF5B. *Biochemistry* **46**:2622.

Pinto *et al.* (2011) Structure-activity relationships for the interactions of 2'- and 3'- (O)- (N-methyl)anthraniloyl-substituted purine and pyrimidine nucleotides with mammalian adenylyl cyclases. *Molecular Pharmacology* **82** (4):358.

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Goettle *et al.* (2007) Molecular analysis of the interaction of Bordetella pertussis adenylyl cyclase with fluorescent nucleotides. *Molecular Pharmacology* **72** (3):526.

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Celda *et al.* (2007) Structural insights into GTPase domain of *Escherichia coli* MnmE protein. *Proteins* **66** (3):726.

Armengod *et al.* (2005) Effects of Mutagenesis in Switch I Region and Conserved Arginines of *Escherichia coli* MnmE Protein, A GTPase Involved in tRNA Modification. *J. Biol. Chem.* **280** (35):30660.

Gille *et al.* (2003) 2' (3')-O- (N-methylantraniloyl)-substituted GTP analogs: a novel class of potent competitive adenyl cyclase inhibitors. *J. Biol. Chem.* **278**:12672.

Remmers *et al.* (1999) Interdomain interactions regulate GDP release from heterotrimeric G proteins. *Biochemistry* **38** (42):13795.

Remmers *et al.* (1998) Detection and quantitation of heterotrimeric G proteins by fluorescence resonance energy transfer. *Anal. Biochem.* **257** (1):89.