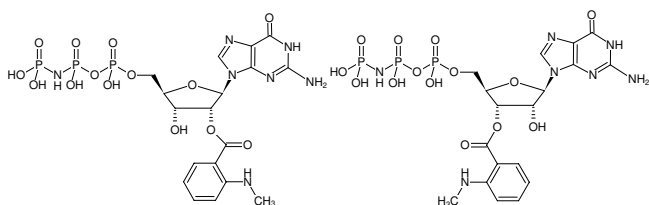


**Mant-GppNHp**

(Mant-GMPPNP)

2'/3'-O-(N-Methyl-anthraniloyl)-guanosine-5'-[(β,γ -imido]triphosphate, Triethylammonium salt

Cat. No.	Amount
NU-207S	10 μ l (10 mM)
NU-207L	5 x 10 μ l (10 mM)



Structural formula of Mant-GppNHp

For research use only!**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: 6 months after date of delivery**Molecular Formula:** C₁₈H₂₄N₇O₁₄P₃ (free acid)**Molecular Weight:** 655.34 g/mol (free acid)**Exact Mass:** 655.06 g/mol (free acid)**CAS#:** 148821-01-6**Purity:** \geq 90 % (HPLC)**Form:** solution in water**Color:** colorless to slightly yellow**Concentration:** 10 mM - 11 mM**pH:** 7.5 \pm 0.5**Spectroscopic Properties:** λ_{max} 252/355 nm, ϵ 22.6/5.7 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5), λ_{exc} 355 nm, λ_{em} 448 nm**Applications:**Inhibition of AC-isoforms^[1, 2]**Specific Ligands:**Gs/Gi-proteins^[3]**Selected References:**[1] Gille *et al.* (2003) Mant-substituted guanine nucleotides: A novel class of potent adenylyl cyclase inhibitors. *Life Sciences* **74**:271.[2] Gille *et al.* (2003) 2' (3')-O- (N-methylanthraniloyl)-substituted GTP analogs: a novel class of potent competitive adenylyl cyclase inhibitors. *J. Biol. Chem.* **278**:12672.[3] Gille and Seifert (2003) Low affinity interactions of BODIPY-FL-GTPyS and BODIPY-FL-GppNHp with Gi- and Gs-proteins. *Naunyn Schmiedebergs Archiv of Pharmacology* **368**:210.Wehner *et al.* (2012) The guanine cap of human guanylate-binding protein 1 is responsible for dimerization and self-activation of GTP hydrolysis. *FEBS J.* **279** (2):203.Ugolev *et al.* (2008) Dissociation of Rac1 (GDP).RhoGDI Complexes by the Cooperative Action of Anionic Liposomes Containing Phosphatidylinositol 3,4,5-Trisphosphate, Rac Guanine Nucleotide Exchange Factor, and GTP. *J. Biol. Chem.* **283** (32):22257.Ugolev *et al.* (2008) Liposomes Comprising Anionic but Not Neutral Phospholipids Cause Dissociation of Rac (1 or 2).RhoGDI Complexes and Support Amphiphile-independent NADPH Oxidase Activation by Such Complexes. *J. Biol. Chem.* **281** (28):19204.Kambach *et al.* (2007) Human OLA1 Defines an ATPase subfamily in the Obg Family of GTP-binding proteins. *J. Biol. Chem.* **282** (27):19928.Pick *et al.* (2007) Tripartite Chimeras Comprising Functional Domains Derived from the Cytosolic NADPH Oxidase components p47^{phox}, p67^{phox}, and Rac1 elicit Activator-independent Superoxide Production by Phagocyte Membranes. *J. Biol. Chem.* **282** (30):22122.Pick *et al.* (2006) Liposomes Comprising Anionic but not neutral Phospholipids cause dissociation of Rac (1 or 2).RhoGDI Complexes and support Amphiphile-independent NADPH oxidase Activation by Such Complexes. *J. Biol. Chem.* **281** (28):19204.Wintermeyer *et al.* (2006) Role and timing of GTP binding and hydrolysis during EF-G-dependent RNA translocation on the ribosome. *PNAS* **103** (37):13670.Diebold *et al.* (2001) Molecular basis for Rac2 regulation of phagocyte NADPH oxidase. *Nature Immunol.* **2**:211.Graham *et al.* (1999) The conserved arginine in rho-GTPase-activating protein is essential for efficient catalysis but not for complex formation with Rho.GDP and aluminum fluoride. *Biochemistry* **38**:985.Nisimoto *et al.* (1997) Rac binding to p67 (phox). Structural basis for

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