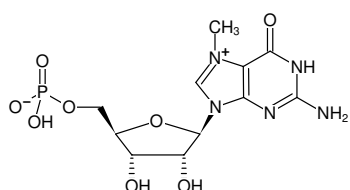


**m⁷GMP**

7-Methyl-guanosine-5'-monophosphate, Triethylammonium salt

Cat. No.	Amount
NU-1135S	100 µl (10 mM)
NU-1135L	5 x 100 µl (10 mM)

Structural formula of m⁷GMP**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:** C₁₁H₁₆N₅O₈P (free acid)**Molecular Weight:** 377.25 g/mol (free acid)**Exact Mass:** 377.07 g/mol (free acid)**CAS#:** 47442-17-1**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} 258/280 nm, ε 9.8/8.0 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Applications:**Association to human scavenger decapping enzyme^[1]Inhibition of methyltransferase activity^[2]**Selected References:**

[1] Darzynkiewicz *et al.* (2007) Interaction of human decapping scavenger with 5-mRNA cap analogues: structural requirements for catalytic activity. *Journal of Physics: Condensed Matter* **19**:285217/1.

[2] Magden *et al.* (2001) Virus-specific mRNA capping enzyme encoded by hepatitis E virus. *J. Virology* **75**:6249.

Shen *et al.* (2001) Structural and thermodynamic behavior of eukaryotic initiation factor 4E in supramolecular formation with 4E-binding protein 1 and mRNA cap analogue, studied by spectroscopic methods. *Chem Pharm Bull* **49** (10):1299.

Carberry *et al.* (1989) A spectroscopic study of the binding of m7GTP and m7GpppG to human protein synthesis initiation factor 4E. *Biochemistry* **28** (20):8078.

Beemon *et al.* (1977) In vitro translation yields a possible Rous sarcoma virus src gene product. *Proc Natl Acad Sci U S A.* **74** (8):3302.