

# 7-Methyl-Guanosine Kit

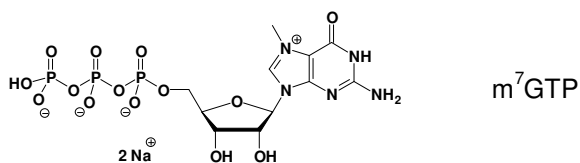
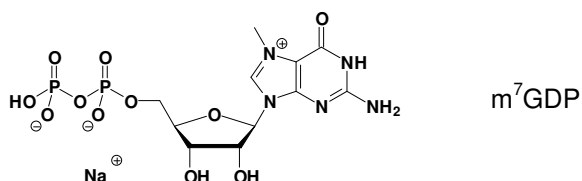
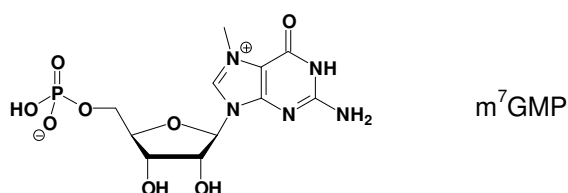
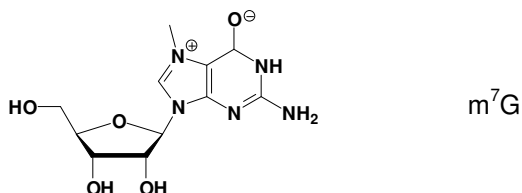
Cat.No.: NK-108

## Kit Contents

7-Methyl-Guanosine Analogs	Cat. No.	Amount
m <sup>7</sup> G	N-1052	3 mg
m <sup>7</sup> GMP	NU-1135	100 Units
m <sup>7</sup> GDP	NU-1134	100 Units
m <sup>7</sup> GTP	NU-1122	100 Units

1 Unit = 1 µl of a 10 mM solution

## Structures



## Introduction

7-Methyl-Guanosines are important for RNA research. In living cells, mRNA is blocked ("capped") with a 7-Methyl-GTP residue at the 5' end. This prevents RNA degradation by 5'-exonucleases.

## Kit Description

The 7-Methyl-Guanosine Kit contains a set of 4 typical 7-Methyl-Guanosine analogs (Nucleoside, 5'-Mono, Di and Triphosphate).

## Selected References:

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 m<sup>7</sup>GTP and m<sup>7</sup>GpppG 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 USA*. **74** (8):3302.

## Storage and Stability

Short term exposure (up to 1 week cumulative) to ambient temperature is possible. Long term storage is recommended at < -20°C. If properly stored, Jena Bioscience guarantees optimal performance of the compounds for 12 months after date of delivery.