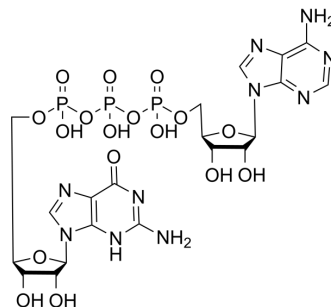


Guanosine 5'-triphosphate-5'-adenosine

| | |
|--------------------|---|
| Cat. No.: | HY-139101 |
| CAS No.: | 10527-47-6 |
| Molecular Formula: | C ₂₀ H ₂₇ N ₁₀ O ₁₇ P ₃ |
| Molecular Weight: | 772.41 |
| Target: | Endogenous Metabolite; DNA/RNA Synthesis |
| Pathway: | Metabolic Enzyme/Protease; Cell Cycle/DNA Damage |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | |
|-------------------------------------|--|
| Description | Guanosine 5'-triphosphate-5'-adenosine (GpppA), a 5' cap analog, can be used for RNA synthesis in vitro. Guanosine 5'-triphosphate-5'-adenosine is a fluorescent substrate analog ^{[1][2]} . |
| IC₅₀ & Target | Human Endogenous Metabolite |
| In Vitro | Guanosine 5'-triphosphate-5'-adenosine (GpppA) labeled with pyrene at the 3' OH position of adenosine acts as an artificial substrate. Fluorescently labeled Guanosine 5'-triphosphate-5'-adenosine (GpppA) and GpppG analogs as potential substrates that represent a reasonable compromise between the structural complexity and requirements of the enzyme ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

REFERENCES

- [1]. Renata Kasprzyk, et al. Direct High-Throughput Screening Assay for mRNA Cap Guanine-N7 Methyltransferase Activity. *Chemistry*. 2020 Sep 1;26(49):11266-11275.
- [2]. Dennis Reichert, et al. Light-control of cap methylation and mRNA translation via genetic code expansion of Ecm1. *Chem Sci*. 2021 Feb 8;12(12):4383-4388.

Caution: Product has not been fully validated for medical applications. For research use only.

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