

Product Data Sheet

Product Name: Biotin-7-GMP lithium solution (100 mM $\pm$ 3 mM)

Cat. No.: GC81413

Chemical Properties

Cas. No.

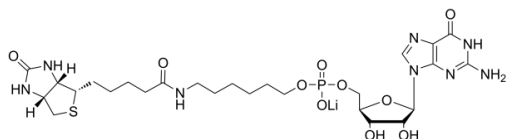
Formula C₂₆H₄₀LiN₈O₁₀PS M.Wt 694.62

Solubility Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Biotin-7-GMP (5'-Biotin-G-monophosphate) lithium solution (100 mM $\pm$ 3 mM) is a 5'-biotinylated guanosine monophosphate reagent. Biotin-7-GMP lithium solution (100 mM $\pm$ 3 mM) covalently links biotin to specific positions (G bases) of RNA molecules, enabling efficient and specific purification and detection of target RNAs through the ultra-stable binding between biotin and streptavidin [1] [2].

In Vitro, Biotin-7-GMP (4-fold molar excess) lithium solution enables the in vitro transcription synthesis of 5'-biotinylated RNA_R9D-14T and RNA_mut aptamers^[1]. Biotin-7-GMP (3 mM; overnight) supports the generation of 5'-end biotinylated RNA aptamers via in vitro transcription at

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

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37°C for use in β 2-adrenoceptor binding studies^[2].

References:

- [1]. Bompiani KM, et al. A high affinity, antidote-controllable prothrombin and thrombin-binding RNA aptamer inhibits thrombin generation and thrombin activity. *Journal of thrombosis and haemostasis: JTH*. 2012 May;10(5):870-80.
- [2]. Kahsai AW, et al. Conformationally selective RNA aptamers allosterically modulate the β 2-adrenoceptor. *Nature chemical biology*. 2016 Sep;12(9):709-16.

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