ATP-polyamine-biotin

Cat. No.: HY-D0183

CAS No.: 1800401-93-7

Molecular Formula: $C_{32}H_{58}N_{11}O_{14}P_3S$

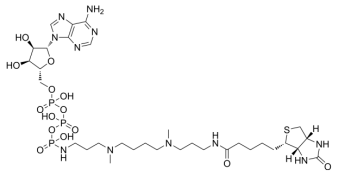
Molecular Weight: 945.85

Target: Biochemical Assay Reagents

Pathway: Others

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

H_2O : 6 mg/mL (6.34 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.0573 mL	5.2863 mL	10.5725 mL
	5 mM	0.2115 mL	1.0573 mL	2.1145 mL
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 7.69 mg/mL (8.13 mM); Clear solution; Need ultrasonic and warming

BIOLOGICAL ACTIVITY

Description

ATP-polyamine-biotin, the first cell-permeable ATP analogue, is an efficient kinase cosubstrate. ATP-polyamine-biotin promotes biotin labeling of kinase substrates in live cells[1].

In Vitro

ATP-polyamine-biotin (APB) is incubated with PKA kinase and full-length protein substrate, myelin basic protein (MBP). Biotinylation was observed only in presence of kinase. In addition, MBP biotinylation was lost in the absence of ATP-polyamine-biotin, in presence of the kinase inhibitor staursporine or upon incubation with acid due to cleavage of phosphoramidate bond. Biotinylated kemptide product is observed only in the presence of APB cosubstrate[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nat Med. 2018 Aug;24(8):1192-1203.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Fouda AE, et al. A Cell-Permeable ATP Analogue for Kinase-Catalyzed Biotinylation. Angew Chem Int Ed Engl. 2015 Aug 10;54(33):9618-21.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA