

## **Product** Data Sheet

# AMP-PNP tetralithium

Cat. No.: HY-128933 CAS No.: 72957-42-7

Molecular Formula:  $C_{10}H_{13}Li_4N_6O_{12}P_3$ 

Molecular Weight: 529.93

Target: Potassium Channel

Pathway: Membrane Transporter/Ion Channel

Storage: -20°C, sealed storage, away from moisture

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

### **BIOLOGICAL ACTIVITY**

Description	$\label{eq:AMP-PNP} AMP-PNP\ tetralithium\ (Adenylyl-imidodiphosphate\ tetralithium)\ is\ a\ non-hydrolysable\ analogue\ of\ ATP\ and\ inhibits\ K_{ATP}\ channels^{[1][2]}.$
In Vitro	AMP-PNP (5 to 500 $\mu$ M; Li salt) reduced the open-probability $p_0$ of $K_{ATP}$ channels and decreases the single-channel currents at high nucleotide concentrations by approximately $10\%^{[2]}$ .  AMP-PNP inhibits $K_{ATP}$ channels of ventricular myocytes and of pancreatic $\beta$ -cells both in the absence and presence of $Mg^{2+}$ ions $^{[2]}$ .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **REFERENCES**

[1]. I M Rybakowska, et al. Activities of purine converting enzymes in heart, liver and kidney mice LDLR-/- and Apo E-/. Nucleosides Nucleotides Nucleic Acids. 2018;37(6):340-347.

[2]. S Hehl, et al. KATP channels of mouse skeletal muscle: mechanism of channel blockage by AMP-PNP. Eur Biophys J. 1994;23(4):231-7.

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

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Inhibitors