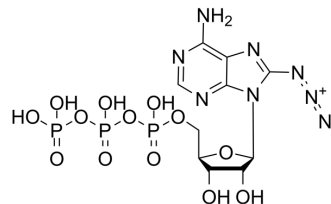


8-Azido-ATP

Cat. No.:	HY-134320
CAS No.:	53696-59-6
Molecular Formula:	C ₁₀ H ₁₅ N ₈ O ₁₃ P ₃
Molecular Weight:	548.19
Target:	Potassium Channel
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	8-Azido-ATP, a photoreactable nucleotide analog, is useful for the identification of proteins, such as DNA-dependent RNA polymerase ^[1] . 8-Azido-ATP is a click chemistry reagent, it contains an Azide group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Alkyne groups. Strain-promoted alkyne-azide cycloaddition (SPAAC) can also occur with molecules containing DBCO or BCN groups.
In Vitro	8-Azido-ATP can be used to identify the viral RNA polymerase on the basis of the ability of the analog to inhibit transcription activity associated with rotavirus particles on exposure to UV light ^[1] . 8-Azido-ATP (azido-ATP) decreases viral transcription in a dose-dependent manner ^[1] . 8-Azido-ATP blocks Kir6.2ΔC26 currents rather less potently than ATP, half-maximal inhibition (K _i) occurring at 2.8 ± 0.4 mM (n = 6) compared with 172 ± 7 mM for ATP (n = 6). The Hill coefficients were 0.9 ± 0.2 for 8-azido-ATP and 1.3 ± 0.1 for ATP ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. S Valenzuela, et al. Photoaffinity labeling of rotavirus VP1 with 8-azido-ATP: identification of the viral RNA polymerase. J Virol. 1991 Jul;65(7):3964-7.
- [2]. K Tanabe, et al. Direct photoaffinity labeling of the Kir6.2 subunit of the ATP-sensitive K⁺ channel by 8-azido-ATP. J Biol Chem. 1999 Feb 12;274(7):3931-3.

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

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