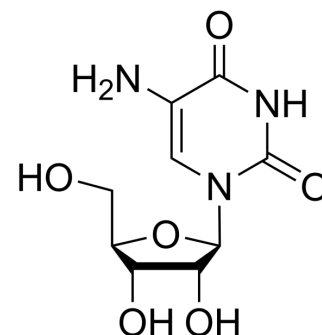


5-Aminouridine

Cat. No.:	HY-130802
CAS No.:	2149-76-0
Molecular Formula:	C ₉ H ₁₃ N ₃ O ₆
Molecular Weight:	259.22
Target:	Fungal; Influenza Virus
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	5-Aminouridine can modify nucleobases and can be incorporated into the target DNA. 5-Aminouridine exhibits a wide range of biological activity and it inhibits the growth of tumors, fungi and viruses ^{[1][2][3]} .
In Vitro	This modified nucleobase, 5-Aminouridine, must exhibit a low enough potential to be oxidized by Os(bpy) ₃ ³⁺ . These modified nucleobases can be inserted into the target DNA by direct synthesis using modified phosphoramidites ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	5-Aminouridine inhibits incorporation of carbamylaspartate into pyrimidines of both RNA and DNA in rat liver and [³² P]phosphate into phospholipids and RNA nucleotides of rat liver slices and hepatoma ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Smith DA, et al. Studies on 5-aminouridine. *Biochim Biophys Acta*. 1966 May 19;119(2):221-8.
- [2]. ROBERTS M, et al. Antimetabolite activity of uridine and cytidine derivatives. *J Biol Chem*. 1952 Feb;194(2):695-701. PMID: 14927662...
- [3]. ROBERTS M, et al. Antimetabolite activity of uridine and cytidine derivatives. *J Biol Chem*. 1952 Feb;194(2):695-701.
- [4]. MR, et al. Detection of attomole quantities [correction of quantities] of DNA targets on gold microelectrodes by electrocatalytic nucleobase oxidation. *Anal Chem*. 2003 Dec 1;75(23):6586-92.

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

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