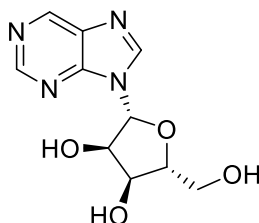


Nebularine

Code No.: **BIA-N2581**

Pack sizes: **5 mg, 25 mg**



Synonyms : Desaminoadenosine, NSC 65423, Nebularine, Purine-9-β-D-ribofuranoside, Purinosine, Ribosylpurine

Specifications

CAS # : **550-33-4**
Molecular Formula : **C₁₀H₁₂N₄O₄**
Molecular Weight : **252.23**
Source : **Synthetic**
Appearance : **White solid**
Purity : **>95% by HPLC**
Long Term Storage : **-20°C**
Solubility : **Soluble in methanol or DMSO**

Application Notes

Nebularine is a purine ribonucleoside isolated from the fungus, *Clitocybe nebularis*, and *Streptomyces* sp.. Nebularine is active against parasites, with moderate binding affinity to *Toxoplasma gondii* adenosine kinase (AppKi 170 μM) and selective and potent toxicity against schistosomes when used in combination nucleoside transport inhibitors. Nebularine has phytotoxic and antimetabolic activities.

References

1. Nebularine from a novel *Microbispora* sp.. Cooper R. et al. *J Indust Microbiol.* 1986, 275.
2. Structure-activity relationship for the binding of nucleoside ligands to adenosine kinase from *Toxoplasma gondii*. *Biochem Pharmacol.* 1995, 49, 1501.
3. Treatment of schistosomiasis by purine nucleoside analogues in combination with nucleoside transport inhibitors. El-Kouni M.H. et al. *Biochem Pharmacol.* 1987, 36, 3815.
4. Nebularine affects plant growth and development but does not interfere with cytokinin signalling. Pospisilova H. et al. *J Plant Growth Reg.* 2009, 28, 321.
5. Therapy of mouse leukemia L1210 with combinations of nebularine and nitrobenzylthioinosine 5'-monophosphate. Lynch T.P. et al. *Cancer Res.* 1981, 41, 560.