

Product Datasheet

Arcyriaflavin A

Catalog No. **BP-00561** · CAS **118458-54-1** · Form **free base** · Physical state **solid** · Color **Brown to reddish brown** · Version **1.0** · Revision **2026-09-11**

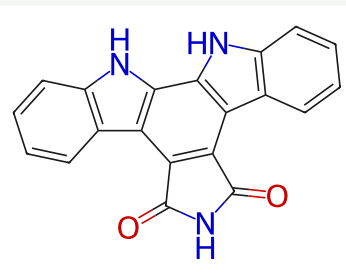
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Target Infection; Alkaloids; Microorganisms; Marine natural products; Disease Research Fields Indole Alkaloids	Research area Fungal
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Molecular formula **C₂₀H₁₁N₃O₂**

Molecular weight **325.3202**

STRUCTURE



DESCRIPTION

Arcyriaflavin A is an indolo[2,3-a]carbazole compound and also a cyclin D1/CDK4 inhibitor. Arcyriaflavin A exists in the marine ascidian Eudistoma sp. and the slime mold Arcyria denudata. Arcyriaflavin A is applicable to research related to colon cancer and lung cancer .

BIOLOGICAL ACTIVITY

Arcyriaflavin A is a potent inhibitor of cdk4/cyclin D1 (IC₅₀ = 59 nM). Also active against CaM kinase II (IC₅₀ = 25 nM) but displays selectivity over several other kinases in vitro (IC₅₀ values for inhibition of PKA and PKC are > 2 and > 100 μM respectively). Inhibits human cytomegalovirus (HCMV) replication in vitro (IC₅₀ = 200 nM).

SOLUBILITY

Soluble in DMSO

In vitro DMSO : 25 mg/mL

REFERENCES

- [1]. Horton PA, et al. Staurosporine aglycone (K252-c) and arcyriaflavin A from the marine ascidian, Eudistoma sp. Experientia. 1994;50(9):843-845.
- [2]. Sanchez-Martinez C, et al. Aryl[a]pyrrolo[3,4-c]carbazoles as selective cyclin D1-CDK4 inhibitors. Bioorg Med Chem Lett. 2003;13(21):3835-3839.