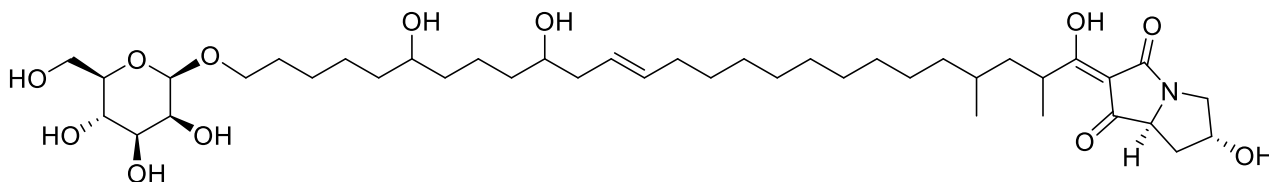


Burnettramic acid A

Code No.: **BIA-B2384**

Pack sizes: **0.25 mg, 1 mg**



Synonyms :

Specifications

CAS #	: 2334483-46-2
Molecular Formula	: C ₄₁ H ₇₁ NO ₁₂
Molecular Weight	: 770
Source	: <i>Aspergillus burnettii</i>
Appearance	: Off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Burnettramic acid A and its aglycone are members of a new class of antibiotics from an Australian fungus *Aspergillus burnettii*. The rare bolaamphiphilic scaffold consists of β -D-mannose linked to a pyrrolizidinedione unit via a 26-carbon chain. Burnettramic acid A is active against the Gram positive bacteria, *B. subtilis* and *S. aureus*, with IC₅₀ 2.3 and 5.9 μ g/mL, respectively. Burnettramic acid A is a potent antifungal agent (IC₅₀ 0.5 μ g/mL and 0.2 μ g/mL against *C. albicans* and *S. cerevisiae*, respectively). Burnettramic acid A is also active against murine myeloma NS-1 cell line (IC₅₀ 13.8 μ g/mL). Removal of the glycosyl group negates antibiotic and antifungal activity, but not activity against murine myeloma cell line (IC₅₀ 8.5 μ g/mL for the aglycone).

References

1. Discovery and Heterologous Biosynthesis of the Burnettramic Acids: Rare PKS-NRPS-Derived Bolaamphiphilic Pyrrolizidinediones from an Australian Fungus, *Aspergillus burnettii*. Hang L. et al. *Org Lett* 2019, 21, 1287.
2. Comprehensive chemotaxonomic and genomic profiling of a biosynthetically talented Australian fungus, *Aspergillus burnettii* sp. nov. Gilchrist C. et al. *FG & B* 2020, 143, 103435.