

# PRODUCT INFORMATION



**AS-2077715**

Item No. 29775

**CAS Registry No.:** 1637356-98-9  
**Formal Name:** 3-[6-(3,5-dimethylheptyl)tetrahydro-2H-pyran-2-yl]-4-hydroxy-1-methyl-5-(2,3,4,5-tetrahydroxycyclopentyl)-2(1H)-pyridinone

**MF:** C<sub>25</sub>H<sub>41</sub>NO<sub>7</sub>

**FW:** 467.6

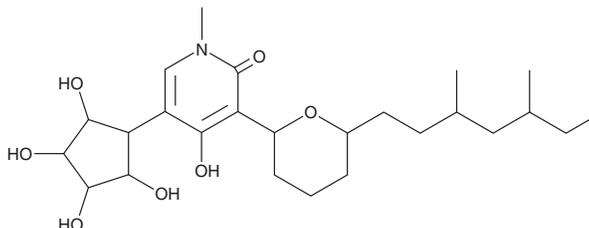
**Purity:** ≥70%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years

**Item Origin:** Fungus/*Polychaeton* sp.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

AS-2077715 is supplied as a solid. A stock solution may be made by dissolving the AS-2077715 in the solvent of choice, which should be purged with an inert gas. AS-2077715 is soluble in organic solvents such as ethanol, methanol, dichloromethane, and DMSO.

## Description

AS-2077715 is a fungal metabolite and an inhibitor of fungal mitochondrial complex III (cytochrome *bc*<sub>1</sub>; IC<sub>50</sub> = 80 ng/ml for *T. mentagrophytes* complex III).<sup>1</sup> It is selective for fungal over mammalian complex III (IC<sub>50</sub>s = 480 and 860 ng/ml for murine EL-4 cell and human Jurkat cell complex III, respectively). AS-2077715 inhibits ATP production in (IC<sub>50</sub> = 0.33 μg/ml) and is fungicidal against *T. mentagrophytes* when used at concentrations of 1 and 10 μg/ml. *In vivo*, AS-2077715 (10 and 20 mg/kg) reduces the number of foot pad skin colony forming units (CFUs) in a guinea pig model of *T. mentagrophytes* infection.<sup>2</sup>

## References

1. Ohsumi, K., Watanabe, M., and Fujie, A. AS2077715 Is a selective inhibitor of fungal mitochondrial cytochrome *bc*<sub>1</sub> complex. *J. Antibiot. (Tokyo)* **67(10)**, 713-716 (2014).
2. Ohsumi, K., Murai, H., Nakamura, I., *et al.* Therapeutic efficacy of AS2077715 against experimental tinea pedis in guinea pigs in comparison with terbinafine. *J. Antibiot. (Tokyo)* **67(10)**, 717-719 (2014).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

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