

# PRODUCT INFORMATION



## Pneumocandin B<sub>0</sub>

Item No. 21527

**CAS Registry No.:** 135575-42-7  
**Formal Name:** (3S)-(4R,5R)-N<sup>2</sup>-[(10R,12S)-10,12-dimethyl-1-oxotetradecyl]-4,5-dihydroxy-L-ornithyl-L-threonyl-(4R)-4-hydroxy-L-prolyl-(4S)-4-hydroxy-4-(4-hydroxyphenyl)-L-threonyl-(3R)-3-hydroxy-L-glutamyl-3-hydroxy-(6→1)-lactam

**Synonyms:** Hydroxy Echinocandin, L-688,786

**MF:** C<sub>50</sub>H<sub>80</sub>N<sub>8</sub>O<sub>17</sub>

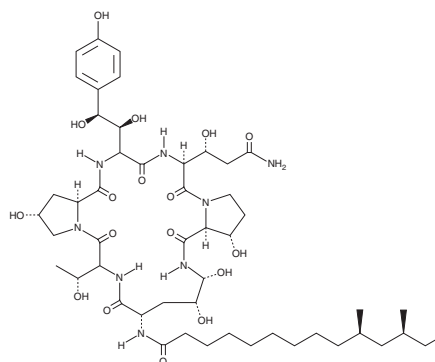
**FW:** 1,065.2

**Purity:** ≥95%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years



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

### Laboratory Procedures

Pneumocandin B<sub>0</sub> is supplied as a solid. A stock solution may be made by dissolving the pneumocandin B<sub>0</sub> in the solvent of choice, which should be purged with an inert gas. Pneumocandin B<sub>0</sub> is soluble in organic solvents such as ethanol and DMSO.

### Description

Pneumocandin B<sub>0</sub> is an antifungal lipopeptide that acts by inhibiting the synthesis of β-(1,3)-D-glucan, a component of fungal cell walls (IC<sub>50</sub>s = 70 and 67 ng/ml for inhibiting glucan synthase in *C. albicans* and *A. fumigatus*, respectively).<sup>1</sup> It can be used to synthesize the echinocandin caspofungin (Item No. 15923).<sup>2</sup>

### References

1. Kurtz, M.B., Douglas, C., Marrinan, J., *et al.* Increased antifungal activity of L-733,560, a water-soluble, semisynthetic pneumocandin, is due to enhanced inhibition of cell wall synthesis. *Antimicrob. Agents Chemother.* **38(12)**, 2750-2757 (1994).
2. Chen, L., Yue, Q., Li, Y., *et al.* Engineering of *Glarea lozoyensis* for exclusive production of the pneumocandin B<sub>0</sub> precursor of the antifungal drug caspofungin acetate. *Appl. Environ. Microbiol.* **81(5)**, 1550-1558 (2015).

#### 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.

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