

## PRODUCT DATA SHEET

Code No.: BIA-M1422

Pack sizes: 1 mg, 5 mg

Synonyms :

## Specifications

Micafungin

CAS # : **235114-32-6**Molecular Formula : **C**<sub>56</sub>**H**<sub>71</sub>**N**<sub>9</sub>**O**<sub>23</sub>**S** 

Molecular Weight : 1270.3

Source : Semi-synthetic

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Moderate water solubility.

## **Application Notes**

Micafungin is a semi-synthetic cyclic lipopeptide belonging to the echinocandin class that was reported in 1999 from Fujisawa in Japan. Unlike other marketed semi-synthetic derivatives in this class, micafungin is not derived from echinocandin but rather from FR901379 which contains a phenolic sulfate to enhance aqueous solubility, a serious limitation in the class. Micafungin inhibits the synthesis of  $\beta$ -(1,3)-D-glucan, an essential component of the cell wall of susceptible fungi and is extensively referenced in the literature with over 700 citations.

## References

- 1. FK463, a novel water-soluble echinocandin lipopeptide: Synthesis and antifungal activity. Tomishima M. et al., J. Antibiot. 1999, 52, 674.
- 2. In vitro activities of a new lipopeptide antifungal agent, FK463, against a variety of clinically important fungi. Tawara S. et al., Antimicrob. Agents Chemother. 2000, 44, 57.

Updated: 20 May 2021 © Copyright BioAustralis 2021