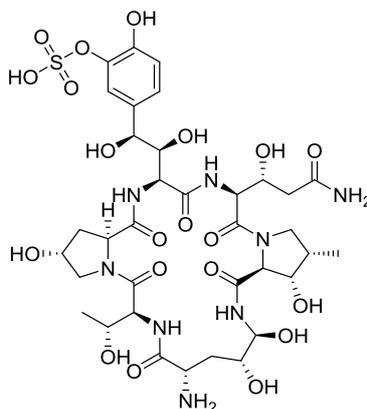


FR 179642

Code No.: **BIA-F1789**

Pack sizes: **5 mg, 25 mg**



Synonyms : CMICA, FR 133303

## Specifications

CAS # : **168110-44-9**  
Molecular Formula : **C<sub>35</sub>H<sub>52</sub>N<sub>8</sub>O<sub>20</sub>S**  
Molecular Weight : **936.9**  
Source : ***Aspergillus* sp.**  
Appearance : **White solid**  
Purity : **>95% by HPLC**  
Long Term Storage : **-20°C**  
Solubility : **Soluble in ethanol, methanol, DMF or DMSO.**

## Application Notes

FR 179642 is a member of the echinocandin antifungal family patented in 1991 by Ueda and colleagues at Fujisawa, now Astellas Pharma. FR 179642 is formed by the selective hydrolysis of FR 901379 using a cyclic lipopeptide acylase found in <0.1% of soil microbes, notably three undescribed *Streptomyces* and two fungi. Like all echinocandins, FR 179642 inhibits the synthesis of 1,3- $\beta$ -D-glucan in the fungal cell wall. FR 179642 is an important pharmaceutical intermediate for production of the commercial antifungal, micafungin.

## References

1. Preparation of cyclic peptide (echinocandin B) antibiotics. Toshiro I. et al., Eur. Pat. Appl. 1991, EP 462531 A2 Dec 27, 1991.
2. Screening and characterization of microorganisms with FR 901379 acylase activity. Ueda S. et al., J. Antibiot. 1992, 63, 65.
3. Novel echinocandin antifungals. Part 1: Novel side-chain analogs of the natural product FR901379. Tomishima M. et al., Bioorg. Med. Chem. Letters 2008, 18, 1474.