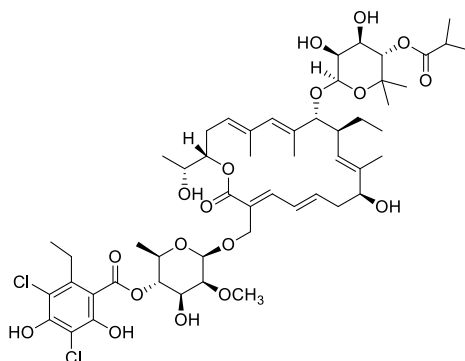


## Fidaxomicin

Code No.: **BIA-F1356**

Pack sizes: **1 mg, 5 mg**



Synonyms : Clostomicin B1, Lipiarmycin A3, Tiacumicin B, OPT 80

## Specifications

CAS #	: <b>873857-62-6</b>
Molecular Formula	: <b>C<sub>52</sub>H<sub>74</sub>Cl<sub>2</sub>O<sub>18</sub></b>
Molecular Weight	: <b>1058</b>
Source	: <b><i>Dactylosporangium aurantiacum</i></b>
Appearance	: <b>White solid</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.</b>

## Application Notes

Fidaxomicin is a recently marketed antibiotic with a confusing history dating back to its original isolation in 1975. Fidaxomicin is the major analogue of a family of macrocyclic lactones, isolated independently by three different groups from cultures belonging to three different genera (*Actinoplanes*, *Dactylosporangium* and *Micromonospora*) known as lipiarmycin A3, tiacumicin B and clostomicin B1, respectively. Fidaxomicin is a narrow spectrum antibiotic with excellent activity against Gram positive bacteria, notably *Clostridium difficile*. Fidaxomicin acts in the gastrointestinal tract without undue disruption to gut microbial flora.

## References

1. Lipiarmycin, a new antibiotic from *Actinoplanes*. I. Description of the producer strain and fermentation studies. Parenti F. et al., *J. Antibiot.* 1975, 28, 247.
2. Clostomicins, new antibiotics produced by *Micromonospora echinospora* subsp. *armeniaca* subsp. nov. I. Production. Omura S. et al., *J. Antibiot.* 1986, 39, 1407.
3. Tiacumicins, a novel complex of 18-membered macrolide antibiotics. I. Taxonomy, fermentation and antibacterial activity. Theriault R.J. et al., *J. Antibiot.* 1987, 40, 567.
4. Tiacumicin B: macrolide antibiotic treatment of *C. difficile*-associated diarrhoea. Revill P. et al., *Drugs of the Future* 2006, 31, 494.