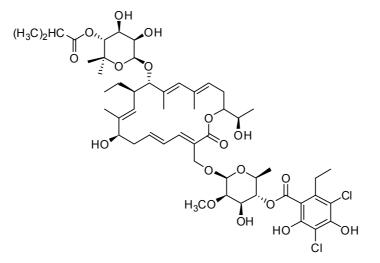


## PRODUCT DATA SHEET

# Fidaxomicin

Code: BIA-F1356

Pack sizes: 1 mg, 5 mg



Synonyms

Clostomicin B1, Lipiarmycin A3, Tiacumicin B, OPT 80

#### Specifications

CAS #	:	873857-62-6
Molecular Formula	:	C <sub>52</sub> H <sub>74</sub> Cl <sub>2</sub> O <sub>18</sub>
Molecular Weight	:	1058.0
Source	:	Dactylosporum aurantiacum
Appearance	:	White solid
Purity	:	>98%
Storage	:	-20°C
Solubility	:	Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

#### **Application Notes**

Fidaxomicin is a recently approved 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.