

Product Name: Fidaxomicin

Product Number: F025

CAS Number: 873857-62-6

Molecular Formula: $C_{52}H_{74}Cl_2O_{18}$

Molecular Weight: 1058.0

Appearance: White solid

Storage Conditions: -20°C

Description: 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.

Fidaxomicin is soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

References: Lipiarmycin, a new antibiotic from Actinoplanes. I. Description of the producer strain and fermentation studies. Parenti F. et al. J. Antibiot. 1975, 28, 247.

Clostomicins, new antibiotics produced by Micromonospora echinospora subsp. armeniaca subsp. nov. I. Production. Omura S. et al. J. Antibiot. 1986, 39, 1407.

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.