

The invention relates to an antibiotic substance of microbial origin, arbitrarily denominated antibiotic 107891 which is produced by fermentation of *Microbispora* sp. ATCC PTA-5024, the pharmaceutically acceptable salts and compositions thereof, and their use as an antibacterial agent having inhibitory activity versus susceptible microbes. Antibiotic 107891, which is a complex comprising two Factors, denominated Factors A1 and A2, has a peptide structure containing lanthionine and methyllanthionine as constituents which are typical characteristics of the antibiotics of the lantibiotics group. Antibiotic 107891 and its Factors A1 and A2 show a good antibacterial activity against Gram-positive bacteria including methicillin resistant and vancomycin resistant strains, and is active also against some Gram-negative bacteria such as *M. catharralis*, *Neisseria* species and *H. influenzae* and *Mycobacteria*.