Synthesis of Monobactam Antibiotic LYS228

Significance: LYS228 is a monobactam antibiotic that inhibits cell-wall synthesis in Gram-negative bacteria through covalent modification of the active-site serine of penicillin-binding protein 3. It is active in vitro and in vivo against Enterobacteriaceae, and it is stable to most serine-β-lactamases and all metallo-β-lactamases profiled to date.