Data Sheet

Product Name: Bedaquiline (fumarate)
Cat. No.: HY-14881A
CAS No.: 845533-86-0
Molecular Formula: C36H35BrN2O6
Molecular Weight: 671.58
Target: Bacterial
Pathway: Anti–infection
Solubility: 10 mM in DMSO

BIOLOGICAL ACTIVITY:
Bedaquiline fumarate, a diarylquinoline antibiotic that targets ATP synthase, is effective for the treatment of Mycobacterium tuberculosis infections.

*In Vitro*: Bedaquiline inhibits the growth of TDR M. tuberculosis strains, with MIC values ranging from 0.125 to 0.5 mg/L\(^1\). Among slowly growing mycobacteria (SGM), bedaquiline exhibits the highest activity against *Mycobacterium avium* with MIC\(_{50}\) and MIC\(_{90}\) values of 0.03 and 16 mg/L, respectively. Among rapidly growing mycobacteria (RGM), *Mycobacterium abscessus subsp. abscessus* (M. abscessus) and *Mycobacterium abscessus subsp. massiliense* (M. massiliense) seem more susceptible to bedaquiline than *Mycobacterium fortuitum*, with MIC\(_{50}\) and MIC\(_{90}\) values of 0.13 and >16 mg/L, respectively, for both species. Bedaquiline also shows moderate in vitro activity against NTM species\(^2\). Bedaquiline has an excellent in vitro activity against *Mycobacterium tuberculosis*, including multidrug resistant M tuberculosis\(^3\).

References:

