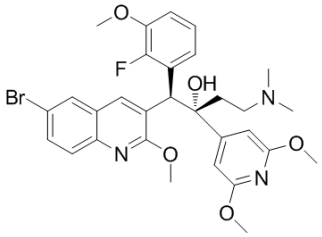
TBAJ-587

Cat. No.:	HY-111747
CAS No.:	2252316-16-6
Molecular Formula:	$C_{30}H_{33}BrFN_3O_5$
Molecular Weight:	614.5
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	TBAJ-587, a potent **anti-tuberculosis** agent, inhibits M.tb strain H37Rv growth with **MIC_{90}**s of 0.006 and <0.02 μg/mL in MABA and LORA assay, respectively. TBAJ-587 inhibits hERG channel minimally, attenuates inhibition of the cardiac potassium channel protein coded by the hERG, which is important for cardiac repolarization[1].
IC_{50} & Target	Anti-tuberculosis[1]
In Vitro	Bedaquiline is a drug of the diarylquinoline class that has proven to be clinically effective against drug-resistant tuberculosis, but has a cardiac liability due to its potent inhibition of the cardiac potassium channel protein hERG. TBAJ-587, an analogue of Bedaquiline, demonstrates more potent anti-tubercular activity, with greatly attenuated hERG blockade. TBAJ-587 inhibits hERG channel with an IC_{50} of 13 μM[1].

REFERENCES

[1]. Sutherland HS, et al. 3,5-Dialkoxypyridine analogues of bedaquiline are potent antituberculosis agents with minimal inhibition of the hERG channel. Bioorg Med Chem. 2019 Apr 1;27(7):1292-1307.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA