

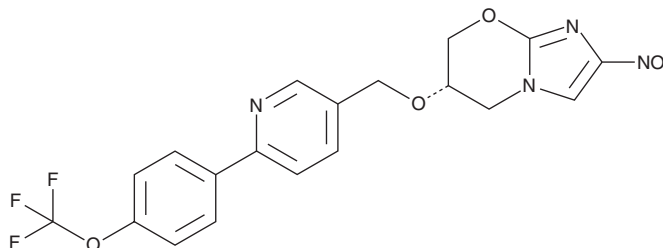
PRODUCT INFORMATION



TBA-354

Item No. 30317

CAS Registry No.: 1257426-19-9
Formal Name: (6S)-6,7-dihydro-2-nitro-6-[[6-[4-(trifluoromethoxy)phenyl]-3-pyridinyl]methoxy]-5H-imidazo[2,1-b][1,3]oxazine
MF: C₁₉H₁₅F₃N₄O₅
FW: 436.3
Purity: ≥98%
UV/Vis.: λ_{max}: 246, 279 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

TBA-354 is supplied as a crystalline solid. A stock solution may be made by dissolving the TBA-354 in the solvent of choice, which should be purged with an inert gas. TBA-354 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of TBA-354 in these solvents is approximately 30 mg/ml.

TBA-354 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TBA-354 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. TBA-354 has a solubility of approximately 0.25 mg in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

TBA-354 is a nitroimidazole antitubercular agent.¹ It is active against clinical isolates of drug-resistant and -sensitive replicating *M. tuberculosis* (MICs = <0.02-0.36 μM). It is selective for *M. tuberculosis* over *M. scrofulaceum*, *M. gilvum*, *M. fortuitum*, *M. triviale*, and *M. smegmatis* (MICs = >11.5 μM) but is active against *M. bovis* and *M. kansasii* (MICs = <0.179 and 2.2 μM, respectively). TBA-354 (100 mg/kg per day) reduces lung colony forming units (CFUs) in mouse models of acute and chronic *M. tuberculosis* infection.

Reference

1. Upton, A.M., Cho, S., Yang, T.J., et al. *In vitro* and *in vivo* activities of the nitroimidazole TBA-354 against *Mycobacterium tuberculosis*. *Antimicrob. Agents Chemother.* **59**(1), 136-144 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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