PRODUCT INFORMATION



Delamanid

Item No. 29697

CAS Registry No.: 681492-22-8

Formal Name: (2R)-2,3-dihydro-2-methyl-6-nitro-

> 2-[[4-[4-(trifluoromethoxy) phenoxy]-1-piperidinyl]phenoxy] methyl]-imidazo[2,1-b]oxazole

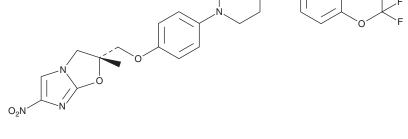
Synonym: OPC-67683 MF: $C_{25}H_{25}F_3N_4O_6$

FW: 534.5 **Purity:** ≥98%

 λ_{max} : 220, 244, 316 nm UV/Vis.: A crystalline solid Supplied as:

-20°C Storage: ≥4 years Stability:

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



Laboratory Procedures

Delamanid is supplied as a crystalline solid. A stock solution may be made by dissolving the delamanid in the solvent of choice, which should be purged with an inert gas. Delamanid is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of delamanid in these solvents is approximately 20 and 25 mg/ml, respectively. Delamanid is slightly soluble in ethanol.

Description

Delamanid is an antimycobacterial compound. 1 It is active against clinical isolates of M. tuberculosis that are susceptible (MIC_{oo}s = 0.01194-0.01248 μ g/ml) or resistant to rifampicin (Item No. 14423), isoniazid (Item No. 20378), ethambutol (Item No. 23713), and/or streptomycin (Item No. 21211; $MIC_{90}s = 0.01221-0.01341 \mu g/ml$). It inhibits the synthesis of methoxy- and keto-mycolic acid in the M. bovis strain BCG (IC_{50} s = 0.036 and 0.021 µg/ml, respectively). Delamanid (0.1, 0.3, and 1 µg/ml) inhibits the growth of the M. tuberculosis strain H37Rv in infected THP-1 cells. It decreases lung bacterial burden in a mouse model of M. tuberculosis infection in a dose-dependent manner.

Reference

1. Matsumoto, M., Hashizume, H., Tomishige, T., et al. OPC-67683, a nitro-dihydro-imidazooxazole derivative with promising action against tuberculosis in vitro and in mice. PLoS Med. 3(11), e466 (2006).

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

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.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 12/07/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM