

PRODUCT INFORMATION



Delavirdine (mesylate)

Item No. 24026

CAS Registry No.: 147221-93-0

Formal Name: N-[2-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]-1H-indol-5-yl]-methanesulfonamide, monomethanesulfonate

MF: $C_{22}H_{28}N_6O_3S \cdot CH_3SO_3H$

FW: 552.7

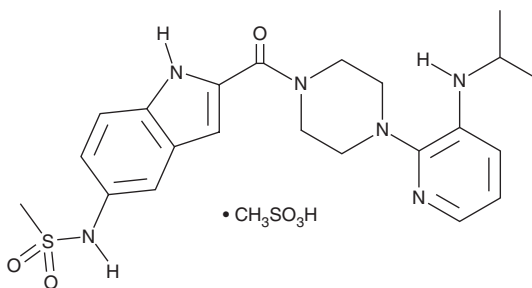
Purity: $\geq 98\%$

UV/Vis.: λ_{max} : 224, 303 nm

Supplied as: A crystalline solid

Storage: $-20^\circ C$

Stability: ≥ 4 years



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

Laboratory Procedures

Delavirdine (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the delavirdine (mesylate) in the solvent of choice, which should be purged with an inert gas. Delavirdine (mesylate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of delavirdine (mesylate) in these solvents is approximately 10, 20, and 14 mg/ml, respectively.

Delavirdine (mesylate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, delavirdine (mesylate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Delavirdine (mesylate) has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Delavirdine is a non-nucleoside reverse transcriptase inhibitor (NNRTI) that selectively inhibits HIV-1 reverse transcriptase over DNA polymerase α and δ *in vitro* (IC_{50} s = 0.26, 440, and >550 μM , respectively).¹ It inhibits growth of clinical isolates of HIV-1 (ED_{50} s = <0.005 -0.69 μM). Delavirdine blocks replication of 25 primary HIV-1 isolates, including strains resistant to 3'-azido-2',3'-deoxythymidine (AZT) or 2',3'-dideoxyinosine, with a mean ED_{50} value of 0.066 μM . Delavirdine also inhibits growth of *L. infantum* promastigotes (IC_{50} = 26.1 μM).² Formulations containing delavirdine have been used in the treatment of HIV.

References

1. Dueweke, T.J., Poppe, S.M., Romero, D.L., *et al.* U-90152, a potent inhibitor of human immunodeficiency virus type 1 replication. *Antimicrob. Agents Chemother.* **37**(5), 1127-1131 (1993).
2. Costa, S., Machado, M., Cavadas, C., *et al.* Antileishmanial activity of antiretroviral drugs combined with miltefosine. *Parasitol Res.* **115**(10), 3881-3887 (2016).

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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