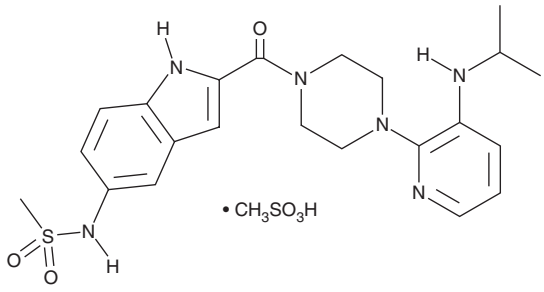
PRODUCT INFORMATION

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:	$C_{22}H_{28}N_6O_3S \bullet CH_3SO_3H$
FW:	552.7
Purity:	≥98%
UV/Vis.:	λ_{max}: 224, 303 nm
Supplied as:	A crystalline solid
Storage:	-20°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).

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