

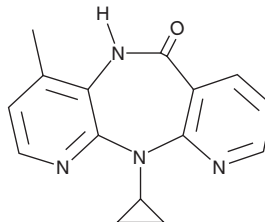
PRODUCT INFORMATION



Nevirapine

Item No. 15117

CAS Registry No.: 129618-40-2
Formal Name: 11-cyclopropyl-5,11-dihydro-4-methyl-6H-dipyrido[3,2-b:2',3'-e][1,4]diazepin-6-one
Synonyms: BI-RG 587, NSC 641530, NVP
MF: C₁₅H₁₄N₄O
FW: 266.3
Purity: ≥98%
UV/Vis.: λ_{max}: 213, 284 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

Nevirapine is supplied as a crystalline solid. A stock solution may be made by dissolving the nevirapine in the solvent of choice. Nevirapine is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of nevirapine in these solvents is approximately 2.5 and 5 mg/ml, respectively.

Nevirapine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, nevirapine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Nevirapine has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Nevirapine is a non-nucleoside reverse transcriptase inhibitor (NNRTI).¹ It binds to HIV-1 reverse transcriptase and inhibits RNA plus-strand initiation (IC₅₀ = 0.45 μM). Nevirapine prevents seroconversion and viremia in a chimpanzee model of HIV-1 infection.² Formulations containing nevirapine have been used in combination therapy for the treatment of HIV-1 infection.

References

- Grobler, J.A., Dornadula, G., Rice, M.R., *et al.* HIV-1 reverse transcriptase plus-strand initiation exhibits preferential sensitivity to non-nucleoside reverse transcriptase inhibitors *in vitro*. *J. Biol. Chem.* **282**(11), 8005-8010 (2007).
- Grob, P.M., Cao, Y., Muchmore, E., *et al.* Prophylaxis against HIV-1 infection in chimpanzees by nevirapine, a nonnucleoside inhibitor of reverse transcriptase. *Nat. Med.* **3**(6), 665-670 (1997).

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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