

Product Datasheet

Nevirapine (orb1226598)

Catalog Number	orb1226598
Category	Small Molecules
Description	<p>A potent and specific non-nucleoside inhibitor (NNRTI) of HIV-1 reverse transcriptase with K_i of 0.2 μM; shows no effect on feline and simian RT or any mammalian DNA polymerases; inhibits HIV-1 replication and protein p24 production. HIV Infection Approved (In Vitro): Nevirapine itself is an inhibitor of only CYP3A4 at concentrations that are well above those of therapeutic relevance ($K_i=270 \mu$M). Nevirapine has been used as a re-differentiation agent to treat cancers in several human cancer models. At all doses (100, 200, 350, 500 μM) tested, nevirapine significantly inhibits cell proliferation after 48 h treatment. At high dose (500 μM), nevirapine significantly increases the percentage of apoptotic cells compared with control. Nevirapine is a potent and selective inhibitor ($IC_{50}=10-100$ nM) of the replication of a wide variety of HIV-1 strains in several cellular assays. (In Vivo): Nevirapine is available for use in combination with nucleoside HIV-1 reverse transcriptase inhibitors (e.g., zidovudine, didanosine, etc.). Nevirapine has received FDA approval for use in combination with HIV-1 protease inhibitors (e.g., saquinavir, ritonavir, indinavir, etc.). In humans, nevirapine is eliminated primarily in the urine as glucuronide conjugates of 2-, 3-, 8-, and 12-hydroxynevirapine. Nevirapine is completely absorbed in both sexes of mouse, rat, rabbit, monkey, and chimpanzee. Nevirapine is extensively metabolized in both sexes of all animal species studied. Nevirapine (9 mg/kg, 18 mg/kg and 36 mg/kg) shows significant reduction in ulcer severity score and ulcer index as compared to the control.</p>
Target	HIV
Purity	>98% (HPLC)
MW	266.2979
Target Areas	HIV-1 reverse transcriptase
Solubility (25°C)	10 mM in DMSO

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CAS Number	129618-40-2
Formula	$C_{15}H_{14}N_4O$
SMILES	<chem>O=C1C2=CC=CN=C2N(C3CC3)C4=NC=CC(C)=C4N1</chem>
Chemical Name	6H-Dipyrido[3,2-b:2',3'-e][1,4]diazepin-6-one, 11-cyclopropyl-5,11-dihydro-4-methyl-
Storage	Storage temperature: -20°C. Stability: ≥ 2 years
Note	For research use only
Expiration Date	12 months from date of receipt.

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