

Product Data Sheet

Product Name: AT-130
 Cat. No.: GC61821

Chemical Properties

Cas. No. 211364-06-6

SMILES O=C(N/C(C(N1CCCCC1)=O)=C(Br)\C2=CC=CC=C2OC)C3=CC=C([N+])([O-])=O)C=C3

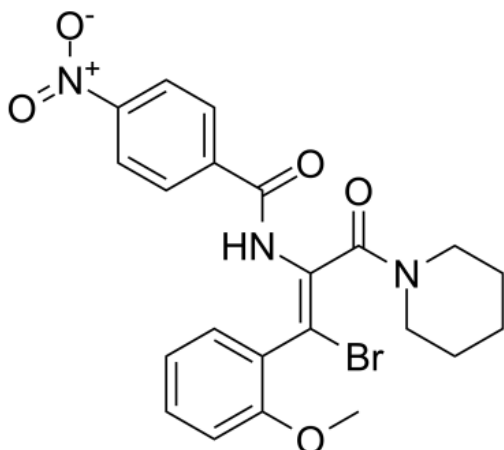
Formula $C_{22}H_{22}BrN_3O_5$ M.Wt 488.33

Solubility DMSO : 25 mg/mL (51.19 mM) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

AT-130, a phenylpropenamide derivative, is a potent hepatitis B virus (HBV) replication non-nucleoside inhibitor. AT-130 inhibits the viral DNA synthesis with an IC₅₀ of 0.13 uM. AT-130 inhibits both wt and mutant HBVs. AT-130 has anti-HBV activity in hepatoma cells[1][2][3].

AT-130 inhibits Wt HBV (IC₅₀=2.4 μM), rtL180M HBV (IC₅₀=9.8 μM), rtM204I HBV (IC₅₀=35.6 μM) [1]. AT-130 (0.1, 1, 5, 10, 100 uM; for 7 days) causes dose-dependent inhibition of wt HBV replication in HepG2 cells transduced with HBV baculovirus. AT-130 at a concentration of 2.5 uM, reduces

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encapsidated HBV DNA by 50% (IC₅₀) and at 18.5 μ M by 90% (IC₉₀)[1]. AT-130 has no toxic to either HepG2 or Huh-7 cells at concentrations of up to 250 μ M[1]. AT-130 (0.005, 0.05, 0.5, 5, 50 μ M) does not inhibit HBV DNA synthesis by blocking the HBV endogenous DNA polymerase reaction directly in Huh 7 or HepG2 cells. AT-130 inhibits HBV DNA replication in hepatoma cells but has no effect on viral DNA polymerase activity or core protein translation[3]. AT-130 (2.5, 18.5 μ M) has no effect on total HBV RNA production but does reduce encapsidated RNA. AT-130 does not affect core protein or nucleocapsid production and the activity of the protein expression vector[3].

References:

- [1]. William E Delaney 4th, et al. Phenylpropenamide derivatives AT-61 and AT-130 inhibit replication of wild-type and lamivudine-resistant strains of hepatitis B virus in vitro. *Antimicrob Agents Chemother.* 2002 Sep;46(9):3057-60.
- [2]. R B Perni , et al. Phenylpropenamide derivatives as inhibitors of hepatitis B virus replication. *Bioorg Med Chem Lett.* 2000 Dec 4;10(23):2687-90.
- [3]. J J Feld, et al. The phenylpropenamide derivative AT-130 blocks HBV replication at the level of viral RNA packaging. *Antiviral Res.* 2007 Nov;76(2):168-77.

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