Product Data Sheet

HIV-1 inhibitor-13

Cat. No.:HY-144112CAS No.:2761172-60-3Molecular Formula: $C_{30}H_{32}N_6O_3$ Molecular Weight:524.61Target:HIV

Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	HIV-1 inhibitor-13 (compound 16c) is a orally active and potent HIV-1 non-nucleoside reverse transcriptase inhibitor (NNRTI), with IC $_{50}$ of 0.14 μ M (HIV-1 RT). HIV-1 inhibitor-13 shows activity against a panel of HIV-1 resistant strains, with EC $_{50}$ values of 2.85-18.0 nM $^{[1]}$.
IC ₅₀ & Target	HIV-1 (WT) 2.85 ± 1.1 nM (EC50)
In Vivo	HIV-1 inhibitor-13 (compound 16c) (SD rats; 2 mg/kg, IV; 10 mg/kg, PO; once) exhibits favorable pharmacokinetic profiles (F = 32.1% and $T_{1/2}$ = 0.88 and 1.05 h, respectively) ^[1] . HIV-1 inhibitor-13 (Kunming mice, 2000 mg/kg, PO, once) shows safety in Kunming mice (LD ₅₀ > 2000 mg/kg) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Kang D, et al. Development of Novel Dihydrofuro[3,4-d] pyrimidine Derivatives as HIV-1 NNRTIs to Overcome the Highly Resistant Mutant Strains F227L/V106A and K103N/Y181C. J Med Chem. 2022 Feb 10;65(3):2458-2470.

Caution: Product has not been fully validated for medical applications. For research use only.

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