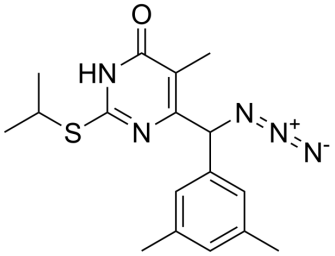
Reverse transcriptase-IN-4

Cat. No.:	HY-152233
Molecular Formula:	$C_{17}H_{21}N_5OS$
Molecular Weight:	343.45
Target:	HIV
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Reverse transcriptase-IN-4 (compound F10) is a potent and selective non-nucleoside reverse transcriptase (NNRT) inhibitor with an EC_{50} value of 0.053 μM for wild-type HIV-1 and an EC_{50} value of 0.26 μM for HIV-1 mutant E138K[1]. Reverse transcriptase-IN-4 is a click chemistry reagent, it contains an Azide group and can undergo copper-catalyzed azide-alkyne cycloaddition reaction (CuAAc) with molecules containing Alkyne groups. Strain-promoted alkyne-azide cycloaddition (SPAAC) can also occur with molecules containing DBCO or BCN groups.
In Vitro	Reverse transcriptase-IN-4 (compound F10) (0-10 μM) shows very weak inhibitory effects on all CYP enzymes, and the inhibitory activities of CYP1A2, CYP2D6, CYP3A4T and CYP3A4M exceeds 50 μM. No significant inhibition is observed for CYP2C9 and CYP2C19, with IC_{50} values of 35.8 μM and 27.1 μM, respectively[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Reverse transcriptase-IN-4 (compound F10) (1.0 g/kg, p.o) is well tolerated in mice, has no acute toxicity and has a good in vivo safety profile[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Xu Ling, et al. Development of novel S-N3-DABO derivatives as potent non-nucleoside reverse transcriptase inhibitors with improved potency and selectivity. Eur J Med Chem. 2022 Dec 23;247:115042.

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