Product Data Sheet

Azt-pmap

Cat. No.: HY-120832 CAS No.: 142629-81-0 Molecular Formula: $C_{20}H_{25}N_{6}O_{8}P$ Molecular Weight: 508.42 Target: HIV

Pathway: Anti-infection

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Azt-pmap, a nucleoside analogue, is an aryl phosphate derivative of AZT. Azt-pmap shows anti-HIV activity ^[1] . AZT is a nucleoside reverse transcriptase inhibitor (NRTI) for HIV infection ^[2] . Azt-pmap 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.
IC ₅₀ & Target	HIV-1
In Vitro	Azt-pmap shows anti-HIV-1 activities in infected C8166 and JM cells with EC $_{50}$ s of 0.08 and 0.32 μ M, respectively. Azt-pmap displays toxicities in infected C8166 and JM cells with TC $_{50}$ s of 500 μ M, respectively. Azt-pmap inhibits virus replication ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. McGuigan C, et al. Aryl phosphate derivatives of AZT retain activity against HIV1 in cell lines which are resistant to the action of AZT. Antiviral Res. 1992 Apr;17(4):311-21.

[2]. Gray LR, et al. The NRTIs lamivudine, stavudine and zidovudine have reduced HIV-1 inhibitory activity in astrocytes. PLoS One. 2013 Apr 16;8(4):e62196.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA