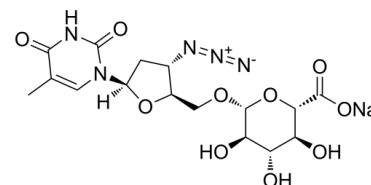


Data Sheet

Product Name:	Zidovudine O-β-D-glucuronide (sodium)
Cat. No.:	CS-0139743
CAS No.:	133525-01-6
Molecular Formula:	C ₁₆ H ₂₀ N ₅ NaO ₁₀
Molecular Weight:	465.35
Target:	Drug Metabolite
Pathway:	Metabolic Enzyme/Protease
Solubility:	10 mM in DMSO



BIOLOGICAL ACTIVITY:

Zidovudine O-β-D-glucuronide (3'-Azido-3'-deoxythymidine β-D-glucuronide) sodium is the major metabolite of Zidovudine. Zidovudine is a nucleoside reverse transcriptase inhibitor (NRTI), widely used to treat HIV infection^{[1][2]}. Zidovudine O-β-D-glucuronide (sodium) is a click chemistry reagent, it contains an Azide group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Alkyne groups. Strain-promoted alkyne-azide cycloaddition (SPAAC) can also occur with molecules containing DBCO or BCN groups.

References:

- [1]. Fayz S, et, al. Zidovudine azido-reductase in human liver microsomes: activation by ethacrynic acid, dipyrindamole, and indomethacin and inhibition by human immunodeficiency virus protease inhibitors. *Antimicrob Agents Chemother.* 1998 Jul;42(7):1654-8.
- [2]. Bélanger AS, et, al. Glucuronidation of the antiretroviral drug efavirenz by UGT2B7 and an in vitro investigation of drug-drug interaction with zidovudine. *Drug Metab Dispos.* 2009 Sep;37(9):1793-6.

CAIndexNames:

Thymidine, 3'-azido-3'-deoxy-5'-O-β-D-glucopyranuronosyl-, monosodium salt

SMILES:

O=C(NC1=O)N(C=C1C)[C@H](C[C@@H]2N=[N+]=[N-])([H])O[C@@H]2CO[C@@H]([C@@H]([C@H]3O)O)O[C@@H]([C@H]3O)C([Na])=O

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

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