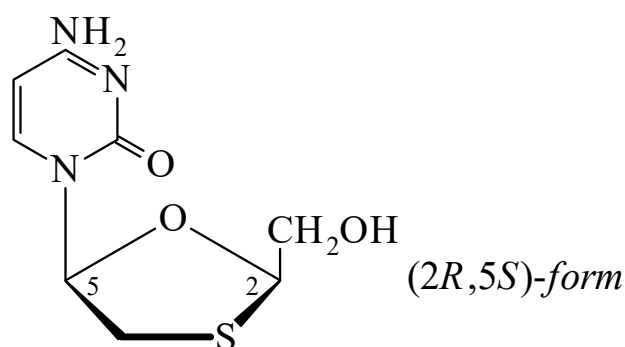




>>Entry Name: Lamivudine, BAN, INN, USAN

Synonym(s): 4-Amino-1-[2-(hydroxymethyl)-1,3-oxathiolan-5-yl]-2(1*H*)-pyrimidinone, 9Cl. 1-[2-(Hydroxymethyl)oxathiolan-5-yl]cytosine. 2',3'-Dideoxy-3'-thiacytidine. Epivir. Zeffix. BCH 189. GR 109714X. 3TC



Related CAS Registry Numbers(s): 131086-21-0 131086-22-1 136846-20-3 136891-12-8 141434-39-1 146726-78-5

Molecular Formula: C₈H₁₁N₃O₃S

Molecular Weight: 229.259

Accurate Mass: 229.052112

Percentage Composition: C 41.91%; H 4.84%; N 18.33%; O 20.94%; S 13.99%

Biological Use/Importance: HIV reverse transcriptase inhibitor. Potent antiviral agent, active against hepatitis B virus and human immunodeficiency virus

Development Status: Marketed drug. Launched 1995 (US) as Combivir (combination with Zidovudine [HHQ23-E](#)). Worldwide 52nd best selling prescription drug (\$0.85 bn) (GlaxoSmithKline) (2000, PharmaBusiness)

Calculated Log P Data: Log P -1.7 (calc)

Other Data: Component of Combivir

>>Variant: (2*R*,5*R*)-form

CAS Registry Number: 139757-68-9

Molecular Formula: C₈H₁₁N₃O₃S

Molecular Weight: 229.259

Accurate Mass: 229.052112

Percentage Composition: C 41.91%; H 4.84%; N 18.33%; O 20.94%; S 13.99%

Melting Point: Mp 153-156°

Optical Rotation: $[\alpha]_D^{25} +146.6$ (c, 0.55 in MeOH)

>>Variant: (2*R*,5*S*)-form

CAS Registry Number: 134678-17-4

Molecular Formula: C₈H₁₁N₃O₃S

Molecular Weight: 229.259

Accurate Mass: 229.052112

Percentage Composition: C 41.91%; H 4.84%; N 18.33%; O 20.94%; S 13.99%

Physical Description: Cryst. (Et₂O/MeOH)

Melting Point: Mp 160-162°

Optical Rotation: $[\alpha]_D^{25} -121.6$ (c, 1.1 in MeOH)

Other Data: Pharmacol. active isomer

>>Variant: (2*S*,5*R*)-form

CAS Registry Number: 134680-32-3

Molecular Formula: C₈H₁₁N₃O₃S

Molecular Weight: 229.259

Accurate Mass: 229.052112

Percentage Composition: C 41.91%; H 4.84%; N 18.33%; O 20.94%; S 13.99%

Melting Point: Mp 145-147°

Optical Rotation: $[\alpha]_D^{25} +120.96$ (c, 1.04 in MeOH)

References: