Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Emtricitabine

Catalog No: tcsc1370

Available Sizes

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Specifications

CAS No:
143491-57-0

Formula:
$C_8H_{10}FN_3O_3S$

Pathway:
Anti-infection;Anti-infection

Target:
Reverse Transcriptase;HIV

Purity / Grade:
>98%

Solubility:
DMSO : 10.8 mg/mL (43.68 mM; Need ultrasonic and warming)

Alternative Names:
BW1592

Observed Molecular Weight:
247.25

Copyright 2021 Taiclone Biotech Corp.

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

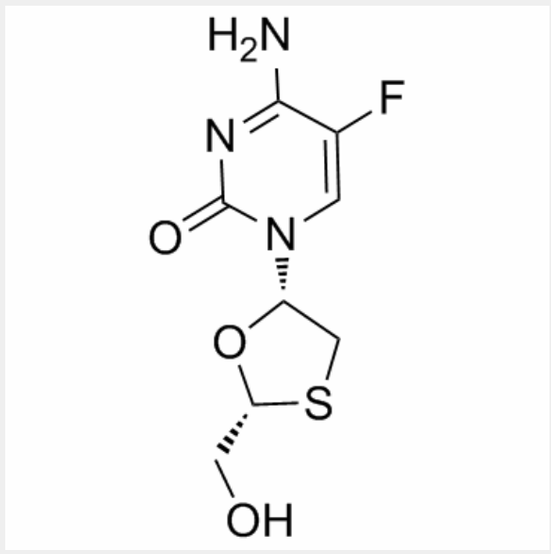
Product Description

Emtricitabine is an inhibitor of the nucleoside reverse transcriptase (**NRTI**) and human immunodeficiency virus type 1 (**HIV-1**); inhibits NRTI with an $\mathbf{EC_{50}}$ of 0.01 μM in PBMC cell.

IC50 & Target: EC50: 0.01 μM (NRTI, PBMC), 0.026 μM (NRTI, HeLa cell)[1]

In Vitro: Emtricitabine has *in vitro* activity against both laboratory strains of HIV-1 and HIV-2 and clinical isolates of HIV-1. The 50% effective concentration (EC_{50}) ranges from 0.002 to 1.5 μ mol/L, depending on the viral isolate and cell line used. Emtricitabine demonstrates *in vitro* synergy with zidovudine and stavudine and additive *in vitro* activity when combines with zalcitabine or didanosine[1].

In Vivo: Reproductive and developmental toxicology studies are conducted with emtricitabine. Oral doses up to 1000 mg/kg/day provided daily area under the curve ($AUC_{0\rightarrow24}$) exposure to pregnant animals approximately 60- (mice) to 120-fold (rabbits) higher than that in humans at the recommended dose of 200 mg given once per day. In a mouse fertility study, emtricitabine had no effect on fertility, sperm count, or early embryonic development. There is no increased incidence of malformations in mouse and rabbit embryofetal toxicology studies. The development and fertility of F1 progeny are unaffected by emtricitabine in a mouse pre- and post-natal study. These data demonstrate a favorable pre-clinical reproductive safety profile for emtricitabine[2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!

Copyright 2021 Taiclone Biotech Corp.