

Letermovir

Catalog No: tcsc1571



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

917389-32-3

Formula:

$C_{29}H_{28}F_4N_4O_4$

Pathway:

Anti-infection

Target:

CMV

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

AIC246

Observed Molecular Weight:

572.55

Product Description

AIC246 is a novel anti-CMV compound which targets the viral terminase complex and remains active against virus resistant to DNA polymerase inhibitors.

IC50 Value: 5.1±1.2 nM (EC50, HCMV-AD169 strain, CPE reduction assay) [1]

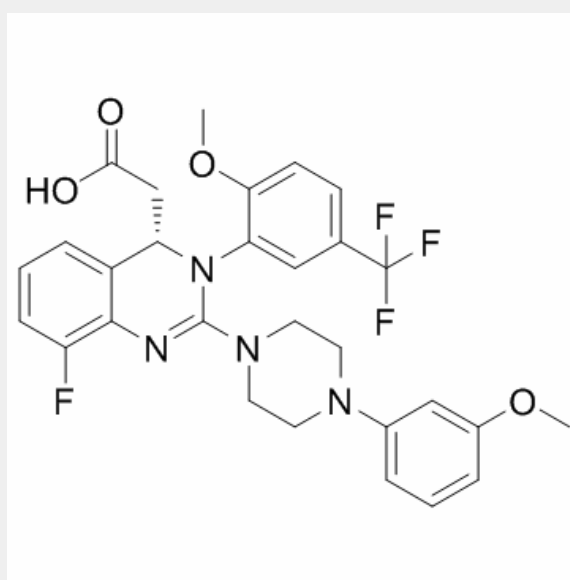
Target: CMV

in vitro: AIC246 blocks viral replication without inhibiting the synthesis of progeny HCMV DNA or viral proteins. Marker transfer analyses confirmed that these mutations were sufficient to mediate AIC246 resistance. The mapping of drug resistance to open reading frame UL56 suggests that viral DNA processing and/or packaging is targeted by AIC246. In line with this, we demonstrate that AIC246 affects the formation of proper unit-length genomes from viral DNA concatemers and interferes with virion maturation [2]. The anti-HCMV activity of AIC246 was evaluated in vitro and in vivo using various cell culture assays and an engineered mouse xenograft model. In addition, antiviral properties of the drug were characterized in comparison to the current gold standard ganciclovir. We demonstrate that AIC246 exhibits excellent in vitro inhibitory activity against HCMV laboratory strains and clinical isolates [3].

in vivo: AIC246 exerts a potent in vivo efficacy in a mouse xenograft model [3].

Toxicity: AIC246 was generally tolerated and no exposure related safety issues across dose ranges. No influence on vital signs and ECG parameters [4].

Clinical trial: Safety and Efficacy Study of a New Antiviral Drug to Prevent Cytomegalovirus Reactivation in Bone Marrow Transplanted Patients. Phase 3



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