TMC647055

Cat. No.: HY-15591

CAS No.: 1204416-97-6

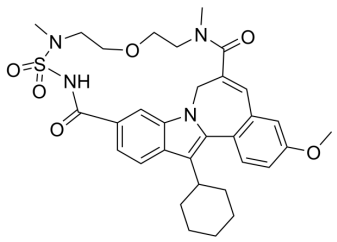
Molecular Formula: $C_{32}H_{38}N_4O_6S$

Molecular Weight: 606.73

Target: HCV

Pathway: Anti-infection

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



BIOLOGICAL ACTIVITY

Description

TMC647055 is a potent nonnucleoside NS5B polymerase inhibitor of HCV replication. TMC647055 has potent HCV combine activity with an IC_{50} value of 82 nM. TMC647055 can be used for the research of Hepatitis C virus (HCV)[1][2].

IC_{50} & Target

EC90: 0.3 μM (Huh7-Luc cell)[1].
EC50: 82 nM (HCV)[2]

In Vitro

TMC647055 has antiviral activity with an EC_{90} value of 0.3 μM in Huh7-Luc cells[1].
TMC647055 has potent combine activity with an EC_{50} value of 82 nM in cellular HCV assays[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

TMC647055 (compound 18a) (2 mg/kg, iv.; 10mg/kg, po.) shows an acceptable PK profile, characterized by high oral bioavailability and high systemic exposure after single oral dosing of 10 mg/kg, combined with a moderate plasma clearanceand low volume of distribution[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Rats[2]
Dosage:	2 mg/kg; 10mg/kg
Administration:	2 mg/kg, iv.; 10mg/kg, po.; singel

Result:

No.	Cl (L/h/kg)	C_{max}(ng/mL)	[Liver] (ng/mL)	L/P	F (%)
TMC647055 (compound 18a)	3.2	440	7800	46	66

CUSTOMER VALIDATION

- Antiviral Res. 2019 Oct;170:104570.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Sandrine Vendeville, et al. Finger loop inhibitors of the HCV NS5b polymerase. Part II. Optimization of tetracyclic indole-based macrocycle leading to the discovery of TMC647055. Bioorg Med Chem Lett. 2012 Jul 1;22(13):4437-43.

[2]. Devogelaere B, et al. TMC647055, a potent nonnucleoside hepatitis C virus NS5B polymerase inhibitor with cross-genotypic coverage. Antimicrob Agents Chemother. 2012 Sep;56(9):4676-4684.

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