JTK-853

Cat. No.: CAS No.: Molecular Formula: Molecular Weight: Target: Pathway: Storage:	HY-19921 954389-09-4 C ₂₈ H ₂₃ F ₇ N ₆ O ₄ S ₂ 704.64 HCV Anti-infection Please store the product under the recommended conditions in the Certificate of Analysis.	$ \xrightarrow{N} \xrightarrow{S} \xrightarrow{N} \xrightarrow{N} \xrightarrow{N} \xrightarrow{S} \xrightarrow{N} \xrightarrow{F} \xrightarrow{F} \xrightarrow{F} \xrightarrow{F} \xrightarrow{F} \xrightarrow{F} \xrightarrow{F} F$
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BIOLOGICAL ACTIVITY		
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Description	JTK-853 is a novel, non-nucleoside Hepatitis C Virus (HCV) polymerase inhibitor which shows effective antiviral activity in HCV replicon cells with EC ₅₀ s of 0.38 and 0.035 μM in genotype 1a H77 and 1b Con1 strains, respectively.	
IC ₅₀ & Target	HCV polymerase ^[1] EC50: 0.38 μM (1a H77 HCV), 0.035 μM (1b Con1 HCV) ^[1]	
In Vitro	JTK-853 is a novel, non-nucleoside Hepatitis C Virus Polymerase inhibitor which shows effective antiviral activity in HCV replicon cells with EC ₅₀ s of 0.38 and 0.035 µM in genotype 1a H77 and 1b Con1 strains, respectively. When JTK-853 is incubated with the replicon cells for 48 h, it shows antiviral activity against genotype 1a H77 and 1b Con1 replicon cells with EC ₉₀ values of 6.5±0.5 and 0.34±0.05 µM, respectively. At 10 µM, JTK-853 induces apparent Huh-7.5 cell death in 2-week culture. JTK-853 suppresses the drug-resistant colony formation in the genotype 1a replicon cells, and the numbers of JTK-853-resistant colonies are much lower than those of GS-9190-resistant colonies for both genotypes _[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

PROTOCOL	
Cell Assay ^[1]	For the determination of cytotoxicity of JTK-853, the Huh-7.5 cells are treated with JTK-853 for 2 weeks. The thumb pocket NNI-B and NS5Ai are added at 100 μM and 100 nM, respectively. JTK-853 is added at 10 μM. JTK-853-containing medium is changed twice a week. Two weeks after the culture, the cells are stained with crystal violet [1% (v/v) in methanol], and then lysed by the lysis buffer. The cytotoxicity is determined as a measurement of OD 595 nm of the cell lysates ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ando I, et al. JTK-853, a novel non-nucleoside hepatitis C virus polymerase inhibitor, demonstrates a high genetic barrier to resistance in vitro. Intervirology. 2013;56(5):302-9.



Product Data Sheet

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

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA