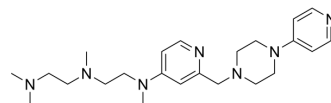


Antiviral agent 54

Cat. No.:	HY-161454
Molecular Formula:	C ₂₃ H ₃₇ N ₇
Molecular Weight:	411.59
Target:	Virus Protease; Influenza Virus; SARS-CoV
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Antiviral agent 54 (compound 33) is a broad-spectrum and orally active antiviral agent. Antiviral agent 54 shows antiviral activity for ZIKV, HCoV-OC43 and influenza A virus (IVA). Antiviral agent 54 decreases the ZIKV RNA and protein level ^[1] .																
IC₅₀ & Target	EC ₅₀ : 0.39 μM (ZIKV); 2.28 μM (HCoV-OC43); 2.69 μM (influenza A) ^[1]																
In Vitro	<p>Antiviral agent 54 (compound 33) (5, 2.5, 1.25, 0.625 μM; 48 h) decreases the ZIKV NS5 protein and RNA level in a dose-dependent manner^[1].</p> <p>Antiviral agent 54 shows antiviral activity for ZIKV, HCoV-OC43 and influenza A virus (IVA) with EC₅₀s of 0.39, 2.28, 2.69 μM, respectively^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HUVEC cells</td> </tr> <tr> <td>Concentration:</td> <td>5, 2.5, 1.25, 0.625 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Decreased the ZIKV NS5 protein level in a dose-dependent manner.</td> </tr> </table> <p>RT-PCR^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HUVEC cells</td> </tr> <tr> <td>Concentration:</td> <td>10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Decreased the ZIKV RNA level in a dose-dependent manner.</td> </tr> </table>	Cell Line:	HUVEC cells	Concentration:	5, 2.5, 1.25, 0.625 μM	Incubation Time:	48 h	Result:	Decreased the ZIKV NS5 protein level in a dose-dependent manner.	Cell Line:	HUVEC cells	Concentration:	10 μM	Incubation Time:	48 h	Result:	Decreased the ZIKV RNA level in a dose-dependent manner.
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REFERENCES

[1]. Ji Y, et al. Design, synthesis, and antiviral activity of 1-aryl-4-arylmethylpiperazine derivatives as Zika virus inhibitors with broad antiviral spectrum. *Bioorg Med Chem*.

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

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