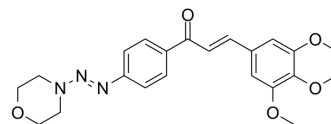


## IAV-IN-2

Cat. No.:	HY-158097
Molecular Formula:	C <sub>22</sub> H <sub>25</sub> N <sub>3</sub> O <sub>5</sub>
Molecular Weight:	411.45
Target:	Influenza Virus
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



## BIOLOGICAL ACTIVITY

<b>Description</b>	IAV-IN-2 (Compound MC-22) inhibits for Influenza A Virus (IAV) through blocking the entry of IAV into host cell via clathrin-mediated endocytosis (CME) <sup>[1]</sup> .								
<b>In Vitro</b>	<p>IAV-IN-2 (0.01-10 μM) inhibits IAV A/XN31 (H3N2) (with IC<sub>50</sub> of 4.08 μM), A/WSN/33 (H1N1), A/Udorn/72 (H3N2) and A/NYMC (H3N2) with 97%–100% inhibitory potency<sup>[1]</sup>.</p> <p>IAV-IN-2 (1-1000 μM) exhibits cytotoxicity in cell A549 with CC<sub>50</sub> of 33.9 μM<sup>[1]</sup>.</p> <p>IAV-IN-2 (10 μM) causes endosomal maturation defect, which disrupts the step-wise priming of the viral core during its endosomal trafficking, disabling the virus to uncoat its capsid and release its genome into the cell<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cytotoxicity Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>A549</td> </tr> <tr> <td>Concentration:</td> <td>1-1000 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Exhibited cytotoxicity in A549.</td> </tr> </table>	Cell Line:	A549	Concentration:	1-1000 μM	Incubation Time:	24 h	Result:	Exhibited cytotoxicity in A549.
Cell Line:	A549								
Concentration:	1-1000 μM								
Incubation Time:	24 h								
Result:	Exhibited cytotoxicity in A549.								

## REFERENCES

[1]. Thottasseril AA, et al., Morpholinodiazanyl chalcone blocks influenza A virus capsid uncoating by perturbing the clathrin-mediated vesicular trafficking pathway. Arch Pharm (Weinheim). 2024 Mar 15:e2300670.

**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