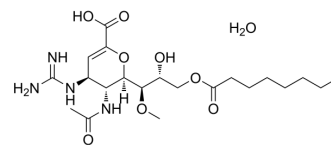


## Laninamivir octanoate hydrate

<b>Cat. No.:</b>	HY-14818C
<b>CAS No.:</b>	1233643-88-3
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>38</sub> N <sub>4</sub> O <sub>9</sub>
<b>Molecular Weight:</b>	490.55
<b>Target:</b>	Influenza Virus
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Laninamivir octanoate hydrate (CS-8958 hydrate), a prodrug of Laninamivir, is a long-acting neuraminidase (NA) inhibitor with anti-influenza virus activity. Laninamivir octanoate hydrate shows anti-influenza activity against Oseltamivir-resistant viruses, and also against the pandemic influenza viruses <sup>[1][2]</sup> .								
<b>In Vitro</b>	Laninamivir octanoate (CS-8958) shows inhibitory activity with an IC <sub>50</sub> of 631-1170 nM, 39.2-221 nM and 128 nM to the H1N1 viruses strains, H3N2 viruses strains and H2N2 (A/Singapore/1/57) virus, respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
<b>In Vivo</b>	Laninamivir octanoate (CS-8958; 95 µg/kg; intranasal administration; three dose; at 4 h before and 4 h and 17 h postinfection) treatment shows significantly life-prolonging effect in infected model <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>Female BALB/c mice (5-6 weeks old) infected with influenza A virus A/PR/8/34<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>0.2 µmol/kg (95 µg/kg)</td> </tr> <tr> <td>Administration:</td> <td>Intranasal administration; three dose; at 4 h before and 4 h and 17 h postinfection</td> </tr> <tr> <td>Result:</td> <td>Showed life-prolonging effect in infected model.</td> </tr> </table>	Animal Model:	Female BALB/c mice (5-6 weeks old) infected with influenza A virus A/PR/8/34 <sup>[1]</sup>	Dosage:	0.2 µmol/kg (95 µg/kg)	Administration:	Intranasal administration; three dose; at 4 h before and 4 h and 17 h postinfection	Result:	Showed life-prolonging effect in infected model.
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### REFERENCES

[1]. Makoto Yamashita, et al. CS-8958, a prodrug of the new neuraminidase inhibitor R-125489, shows long-acting anti-influenza virus activity. *Antimicrob Agents Chemother.* 2009 Jan;53(1):186-92.

[2]. Hideyuki Ikematsu, et al. Laninamivir octanoate: a new long-acting neuraminidase inhibitor for the treatment of influenza. *Expert Rev Anti Infect Ther.* 2011 Oct;9(10):851-7.

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

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