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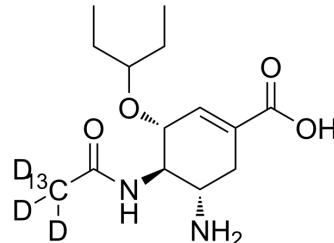
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## Oseltamivir acid-<sup>13</sup>C,d<sub>3</sub>

<b>Cat. No.:</b>	HY-13318S1
<b>Molecular Formula:</b>	C <sub>13</sub> <sup>13</sup> CH <sub>21</sub> D <sub>3</sub> N <sub>2</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	288.36
<b>Target:</b>	Isotope-Labeled Compounds; Drug Metabolite; Influenza Virus
<b>Pathway:</b>	Others; Metabolic Enzyme/Protease; Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Oseltamivir acid-13C,d3 (GS 4071-13C,d3; Ro 64-0802-13C,d3) is a 13C- and deuterium-labeled Oseltamivir acid (HY-13318). Oseltamivir acid is the active metabolite of Oseltamivir phosphate and inhibits influenza virus neuraminidase ( $IC_{50}=2$ nM). Oseltamivir acid is orally active and can be used to study influenza A/B infections <sup>[1][2][3][4][5]</sup> .
<b>In Vitro</b>	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.
- [2]. Ferraris O, et al. Sensitivity of influenza viruses to zanamivir and oseltamivir: a study performed on viruses circulating in France prior to the introduction of neuraminidase inhibitors in clinical practice. Antiviral Res. 2005 Oct;68(1):43-8.
- [3]. Ghosh GC, et al. Oseltamivir carboxylate, the active metabolite of oseltamivir phosphate (Tamiflu), detected in sewage discharge and river water in Japan. Environ Health Perspect. 2010 Jan;118(1):103-7.
- [4]. Gubareva LV, et al. Comparison of the activities of zanamivir, oseltamivir, and RWJ-270201 against clinical isolates of influenza virus and neuraminidase inhibitor-resistant variants. Antimicrob Agents Chemother. 2001 Dec;45(12):3403-8.
- [5]. Yen HL, et al. Virulence may determine the necessary duration and dosage of oseltamivir treatment for highly pathogenic A/Vietnam/1203/04 influenza virus in mice. J Infect Dis. 2005 Aug 15;192(4):665-72.
- [6]. Li W, et al. Identification of GS 4104 as an orally bioavailable prodrug of the influenza virus neuraminidase inhibitor GS 4071. Antimicrob Agents Chemother. 1998 Mar;42(3):647-53.
- [7]. Hoffmann G, et al. Nonclinical pharmacokinetics of oseltamivir and oseltamivir carboxylate in the central nervous system. Antimicrob Agents Chemother. 2009 Nov;53(11):4753-61.

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

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