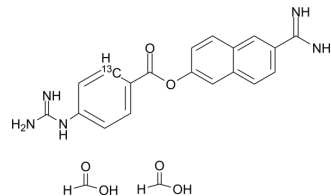


## Nafamostat formate salt-<sup>13</sup>C<sub>6</sub>

<b>Cat. No.:</b>	HY-B0190S1
<b>Molecular Formula:</b>	C <sub>15</sub> <sup>13</sup> C <sub>6</sub> H <sub>21</sub> N <sub>5</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	445.38
<b>Target:</b>	Ser/Thr Protease; Apoptosis; SARS-CoV
<b>Pathway:</b>	Metabolic Enzyme/Protease; Apoptosis; Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Nafamostat formate salt- <sup>13</sup> C <sub>6</sub> is the <sup>13</sup> C labeled Nafamostat[1]. Nafamostat, a synthetic serine protease inhibitor, is an anticoagulant. Nafamostat suppresses T cell auto-reactivity by decreasing granzyme activity and CTL cytotoxicity. Nafamostat blocks activation of SARS-CoV-2[2][3][4][5].
<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. Deuterium 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 Feb;53(2):211-216.
- [2]. Ikehara S, et al. Effect of FUT-175, a new synthetic protease inhibitor, on the development of lupus nephritis in (NZB x NZW) F1 mice. *Immunology*. 1985 Aug;55(4):595-600.
- [3]. Pak K, et al. Effectiveness of FUT-175, protease inhibitor, as an anticoagulant to hemodialysis. *Hinyokika Kyo*. 1988 Jun34(6):1077-81.
- [4]. Homma S, et al. Nafamostat mesilate, a serine protease inhibitor, suppresses interferon-gamma-induced up-regulation of programmed cell death ligand 1 in human cancer cells. *Int Immunopharmacol*. 2018 Jan54:39-45.
- [5]. Markus Hoffmann, et al. Nafamostat Mesylate Blocks Activation of SARS-CoV-2: New Treatment Option for COVID-19. *Antimicrob Agents Chemother*. 2020 Jun 64(6): e00754-20.

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

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