

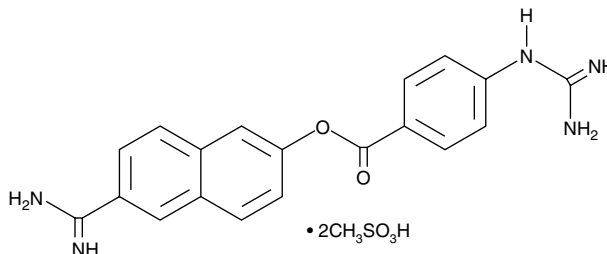
Product Information



Nafamostat (mesylate)

Item No. 14837

CAS Registry No.: 82956-11-4
Formal Name: 4-[(aminoiminomethyl)amino]-6-(aminoiminomethyl)-2-naphthalenyl ester-benzoic acid, dimethanesulfonate
Synonyms: Coahibitor, FUT 175, Nafamastat
MF: $C_{19}H_{17}N_5O_2 \cdot 2CH_3SO_3H$
FW: 539.6
Purity: $\geq 98\%$
Stability: ≥ 2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max} : 243 nm



Laboratory Procedures

For long term storage, we suggest that nafamostat (mesylate) be stored as supplied at -20°C . It should be stable for at least two years.

Nafamostat (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the nafamostat (mesylate) in the solvent of choice. Nafamostat (mesylate) is soluble in DMSO at a concentration of approximately 1 mg/ml.

Nafamostat (mesylate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, nafamostat (mesylate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Nafamostat (mesylate) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Nafamostat is a serine protease inhibitor that is capable of inhibiting trypsin (a digestive system protease; $K_i = 15$ nM), trypsin (a mast cell protease; $K_i = 95.3$ pM), and additional proteases in the coagulation cascade including thrombin ($K_i = 0.84$ μM).¹ In a mouse model of allergic asthma, a dose of 300 mg/kg nafamostat mesylate has been shown to inhibit serine proteolytic activity, to decrease circulating levels of eosinophils and lymphocytes in bronchoalveolar lavage fluid, and to reduce interleukin-13 and eotaxin production associated with antigen-induced airway eosinophilia and goblet cell hyperplasia.²

References

1. Mori, S., Itoh, Y., Shinohata, R., *et al.* Nafamostat mesilate is an extremely potent inhibitor of human trypsin. *J. Pharmacol. Sci.* **92**(4), 420-423 (2003).
2. Ishizaki, M., Tanaka, H., Kajiwar, D., *et al.* Nafamostat mesilate, a potent serine protease inhibitor, inhibits airway eosinophilic inflammation and airway epithelial remodeling in a murine model of allergic asthma. *J. Pharmacol. Sci.* **108**(3), 355-363 (2008).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14837

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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