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_{5}O_{2} • 2CH_{3}SO_{3}H
FW: 539.6

Purity: ≥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), tryptase (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

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

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to your email at your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals herein. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Cayman Chemical Company will at Buyer’s option either repair or replace any non-conforming material delivered. If Buyer notifies Cayman in writing within thirty (30) days after arrival of the material that it is non-conforming, and if Buyer returns the non-conforming material to Cayman, Buyer will be entitled to the return of the purchase price of the non-conforming material. Buyer will bear the cost of returning the non-conforming material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.