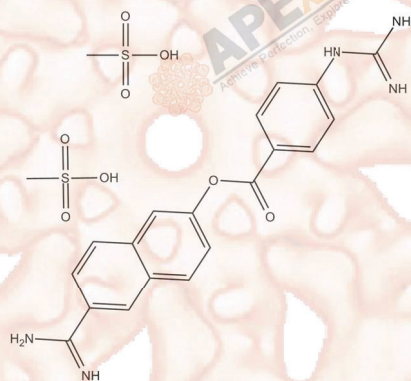


Nafamostat Mesylate(FUT-175)

Cat. No.:	A2586
CAS No.:	82956-11-4
Formula:	C ₁₉ H ₁₇ N ₅ O ₂ ·2CH ₄ O ₃ S
M.Wt:	539.59
Synonyms:	Nafamostat Mesylate, FUT-175, Futhan
Target:	Proteases
Pathway:	Serine Protease
Storage:	Store at -20°C



Solvent & Solubility

≥27mg/mL in DMSO, ≥54mg/mL in H₂O

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		1.8533 mL	9.2663 mL	18.5326 mL
	5 mM		0.3707 mL	1.8533 mL	3.7065 mL
	10 mM		0.1853 mL	0.9266 mL	1.8533 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Serine protease inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	The human pancreatic tumor cell lines PANC-1
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	3 h; 160 µg/mL
Applications:	In assessment of the NF- κB activation by ELISA, concentration of NF- κB p65

in the nuclear extracts of PANC-1 cells in combination group was statistically lower than those in oxaliplatin group ($p < 0.0001$). Like nuclear NF- κ B levels, phosphorylated I κ B α levels by Western blot analysis in combination group were significantly lower than those in oxaliplatin group ($p = 0.037$). In other words, FUT-175 inhibits oxaliplatin-induced NF- κ B activation by suppressing I κ B α phosphorylation in vitro.

Animal experiment

Animal models:	Five-week-old male nude mice
Dosage form:	30 μ g/g; thrice a week for 6 weeks; intraperitoneal injection
Applications:	A pancreatic cancer model was established by injection of PANC-1 cells (5×10^6 cells) in 200 μ M of PBS subcutaneously into the right side of the back of the animals. In vivo, the tumor growth in combination group (oxaliplatin and nafamostat mesilate) was significantly slower than that of oxaliplatin group ($p < 0.0001$). Tumor volume in combination group was significantly smaller than that of oxaliplatin group ($p = 0.048$).
Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

In Vivo

Product Citations

See more customer validations on www.apexbt.com.

References

[1] Gocho T, Uwagawa T, Furukawa K, et al. Combination chemotherapy of serine protease inhibitor nafamostat mesilate with oxaliplatin targeting NF- κ B activation for pancreatic cancer[J]. Cancer letters, 2013, 333(1): 89-95.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX[®]BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

