

Product Name: Gabexate mesylate

Catalog No.: 1798

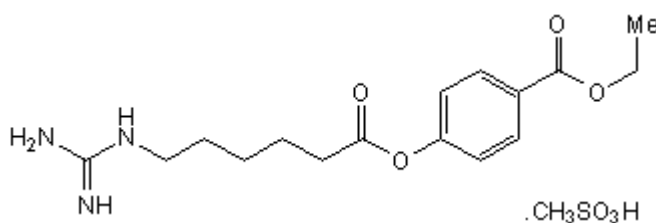
Batch No.: 3

CAS Number: 56974-61-9

IUPAC Name: 4-[[6-[(Aminoiminomethyl)amino]-1-oxohexyl]oxy]-benzoic acid ethyl ester mesylate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₂₃N₃O₄·CH₃SO₃H
Batch Molecular Weight: 417.48
Physical Appearance: white solid
Solubility: water to 100 mM
 phosphate buffered saline to 50 mM
Storage: Desiccate at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.5% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	48.91	6.52	10.07
Found	49.1	6.6	10.12

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Serine protease inhibitor; inhibits trypsin, plasmin, plasma kallikrein and thrombin (IC₅₀ values are 9.4, 30, 41 and 110 μM respectively). Antithrombotic in vitro and in vivo. Also inhibits LPS-induced TNF-α production, probably by inhibiting NF-κB and AP-1 activation.

Physical and Chemical Properties:

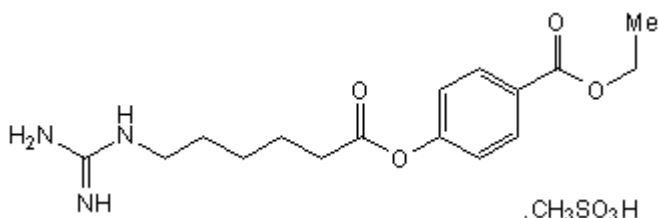
Batch Molecular Formula: C₁₆H₂₃N₃O₄.CH₃SO₃H

Batch Molecular Weight: 417.48

Physical Appearance: white solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM

phosphate buffered saline to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Tamura et al (1977) Synthetic inhibitors of trypsin, plasmin, kallikrein, thrombin, C_{1r} and C₁ esterase. *Biochim.Biophys.Acta* **484** 417. PMID: 143965.

Ohno et al (1980) FOY: [Ethyl p-(6-guanidinohexanoyloxy) benzoate] methanesulfonate as a serine proteinase inhibitor. I. Inhibition of thrombin and factor Xa *in vitro*. *Thromb.Res.* **19** 579. PMID: 6449757.

Ohno et al (1981) FOY: [Ethyl p-(6-guanidinohexanoyloxy) benzoate] methanesulfonate as a serine proteinase inhibitor. II. *In vivo* effect on coagulo-fibrinolytic system in comparison with heparin or aprotinin. *Thromb.Res.* **24** 445. PMID: 6178174.

Yuksel et al (2003) Gabexate mesilate, a synthetic protease inhibitor, inhibits lipopolysaccharide-induced tumor necrosis factor-α production by inhibiting activation of both nuclear factor-κB and activator protein-1 in human monocytes. *J.Pharmacol.Exp.Ther.* **305** 298. PMID: 12649382.

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