

## Product Data Sheet

Product Name: Gabexate mesylate

Cat. No.: GC13711

### Chemical Properties

Cas. No. 56974-61-9

Chemical Name ethyl 4-[6-(diaminomethylideneamino)hexanoyloxy]benzoate;methanesulfonic acid

SMILES CCOC(=O)C1=CC=C(C=C1)OC(=O)CCCCN=C(N)N.CS(=O)(=O)O

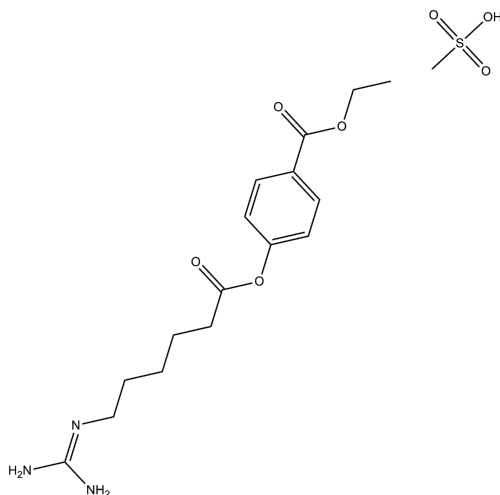
Formula  $C_{16}H_{23}N_3O_4 \cdot CH_4O_3S$  M.Wt 417.48

Solubility  $\geq 18.2$  mg/mL in DMSO,  $\geq 99.8$  mg/mL in EtOH,  $\geq 102.4$  mg/mL in Water  
Storage Store at  $-20^{\circ}\text{C}$

General tips For obtaining a higher solubility, please warm the tube at  $37^{\circ}\text{C}$  and shake it in the ultrasonic bath for a while. Stock solution can be stored below  $-20^{\circ}\text{C}$  for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



### Background

Gabexate mesylate is a non-antigenic synthetic inhibitor of trypsin-like serine proteinases with  $K_i$  values of 3.4nM and 180nM, respectively for human trypsin and bovine trypsin [1].

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

## Product Data Sheet

---

Gabexate mesylate is a drug used in the treatment of pancreatitis, disseminated intravascular coagulation and as a regional anticoagulant for hemodialysis. Gabexate mesylate is reported to bind to the primary specificity site S1 of human and bovine tryptases. The carbonyl group of gabexate mesylate interacts with the oxyanion binding hole of the enzyme. The tighter binding of gabexate mesylate to human tryptase results in a higher affinity than to bovine tryptase [1].

Gabexate mesylate is also found to inhibit cNOS and iNOS, with  $K_i$  values of 150  $\mu$ M and 5mM. It up-regulates iNOS gene expression. In addition, gabexate mesylate inhibits the LPS/IFN $\gamma$ -induced NO production with EC50 value of 250  $\mu$ M [2].

### References:

- [1] Erba F, Fiorucci L, Pascarella S, Menegatti E, Ascenzi P, Ascoli F. Selective inhibition of human mast cell tryptase by gabexate mesylate, an antiproteinase drug. *Biochem Pharmacol.* 2001 Feb 1;61(3):271-6.
- [2] Colasanti M, Persichini T, Venturini G, Menegatti E, Lauro GM, Ascenzi P. Effect of gabexate mesylate (FOY), a drug for serine proteinase-mediated diseases, on the nitric oxide pathway. *Biochem Biophys Res Commun.* 1998 May 19;246(2):453-6.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: [tech@glpbio.com](mailto:tech@glpbio.com)

Address: 10292 Central Ave. #205, Montclair, CA, USA