

## **Gabexate mesylate**

07/20

ALTERNATE NAMES: FOY; Megacart; ethyl 4-[6-(diaminomethylideneamino)hexanoyloxy]benzoate; methanesulfonic acid; 4-

[[6-[(aminoiminomethyl)amino]-1-oxohexyl]oxy]benzoic acid ethyl ester mesylate; [Ethyl p-(6-

guanidinohexanoyloxy) benzoate]methanesulfonate

**CATALOG #:**B3058-50 50 mg
B3058-250 250 mg

STRUCTURE:

$$H_2N$$
 $H_2N$ 
 $NH$ 
 $NH$ 

**MOLECULAR FORMULA:** C<sub>17</sub>H<sub>27</sub>N<sub>3</sub>O<sub>7</sub>S

MOLECULAR WEIGHT: 417.48

**CAS NUMBER:** 56974-61-9

APPEARANCE: White solid

PURITY: ≥97%

**SOLUBILITY:** ~25 mg/ml in DMSO and DMF

**DESCRIPTION:** Gabexate is an inhibitor of serine proteases. It inhibits plasma kallikrein, thrombin, plasmin, factor Xa

with  $K_i$  values of 0.2  $\mu$ M, 0.97  $\mu$ M, 1.6  $\mu$ M and 8.5  $\mu$ M. It exerts an anticoagulant effect on the clotting activity of thrombin. It inhibits LPS-induced TNF-alpha production in monocytes by inhibiting activation of both NF-kappaB and activator protein-1. It slightly inhibits SARS-CoV-2 S-driven host cell entry in

lung cells.

**STORAGE TEMPERATURE:** -20°C. Store in the dark. Product is light sensitive. Protect from air. Store under desiccating conditions.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of

exposure.

**REFERENCES:**1. Yuksel, M., Okajima, K., Uchiba, M., et al. 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(1), 298-305

(2003)

 Öhno, H., Kosaki, G., Kambayashi, J., et al. FOY: [ethyl P-(6-guanidinohexanoyloxy) benzoate] methanesulfonate as a serine proteinase inhibitor. I. Inhibition of thrombin and factor Xa in vitro.

Thromb. Res. 19(4-5), 579-588 (1980).

3. Hoffmann, M., Schroeder, S., Kleine-Weber, H., et al. Nafamostat Mesylate Blocks Activation of SARS-CoV-2: New Treatment Option for COVID-19. Antimicrobial Agents and Chemotherapy. 64, 6;

e00754-20, (2020).

## **RELATED PRODUCTS:**

Nafamostat Mesylate (Cat. No. 1760) Camostat mesylate (Cat. No. B2145) Dexamethasone (Cat. No. 1042) E-64d (Cat. No. B3057) PMSF (Cat. No. 1548)

DISCLAIMER: FOR RESEARCH USE ONLY! Not to be used on humans.