

**DATA SHEET**

**Product Name:** Nafamostat Mesylate

**Catalog #:** CV-1002

**Alt:** CAS # 82956-11-4; 6-Amidino-2-naphthyl-4-guanidinobenzoate dimesylate; Futhan (FUT-175)

**Molecular Mass:** 539.6

**Analysis:** >98% (HPLC); NMR (conforms)

**Supplied As:** White powder

**Resuspension:** May be dissolved in water (50 mg/ml); or DMSO (50 mg/ml)

**Storage:** Store desiccated as supplied at room temperature for up to 2 years. Store aqueous solutions at 4°C for up to 1 month or at -80°C for up to 6 months.

**Description:** A potent and reversible serine protease inhibitor ( $IC_{50}=0.3-54 \mu M$ )<sup>1</sup>. Selectively inhibits human tryptase ( $K_i = 95.3 \text{ pM}$ ) when employed at low concentrations<sup>2</sup>. Dramatically suppresses pulmonary dysfunction in a rat model<sup>3</sup> and inhibits airway eosinophilic inflammation<sup>4</sup>. Anticoagulant, thrombin inhibitor which attenuates neuronal damage in a transient focal cerebral ischemia model<sup>5</sup>. Also blocks TRPM7 in the absence of extracellular divalent cations<sup>6</sup>. Cell permeable.

**References:**

1. Fujii, S., and Hitomi, Y., (1981) *Biochim. Biophys. Acta*, *661*: 342
2. Mori, S., et al., (2003) *J. Pharmacol. Sci.*, *92*: 420
3. Sendo, T., et al., (2003) *Br. J. Pharmacol.*, *138*: 959
4. Ishizaki, M., et al., (2008) *J. Pharmacol. Sci.*, *108*: 355
5. Chen, T., et al., (2014) *Sci. Rep.*, *4*: 5531
6. Chen, X., et al., (2010) *Mol. Brain*, *3*: 38

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