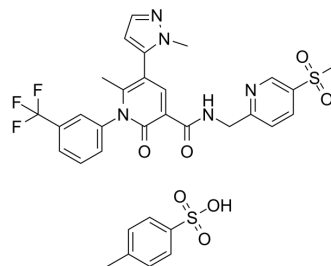


## Alvelestat tosylate

<b>Cat. No.:</b>	HY-15651A
<b>CAS No.:</b>	1240425-05-1
<b>Molecular Formula:</b>	C <sub>32</sub> H <sub>30</sub> F <sub>3</sub> N <sub>5</sub> O <sub>7</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	717.74
<b>Target:</b>	Elastase
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Alvelestat (tosylate) is an orally bioavailable, affinity and selective inhibitor of neutrophil elastase (NE) with a pIC <sub>50</sub> value of 7.9 nM, a K <sub>i</sub> value of 9.4 nM and a K <sub>d</sub> value of 9.5 nM <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	pIC: 7.9 nM; Ki: 9.4 nM; Kd: 9.5 nM (neutrophil elastase) <sup>[1]</sup>
<b>In Vitro</b>	Alvelestat (20 µg/mL; 16 hours; HBE and A549 cells) treatment decreases cells death and decreases the levels of IL-1β, IL-6, and TNF-α in vitro <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- Cancer Cell. 2021 Mar 8;39(3):423-437.e7.
- NPJ Regen Med. 2020 Oct 30;5(1):19.
- Biomed Pharmacother. 2020 Dec 26;134:111152.
- FEBS Open Bio. 2018 Mar 25;8(5):751-763.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

### REFERENCES

- [1]. Stevens T, et al. AZD9668: pharmacological characterization of a novel oral inhibitor of neutrophil elastase. *J Pharmacol Exp Ther.* 2011 Oct;339(1):313-20.
- [2]. Li H, et al. Neutrophil extracellular traps contribute to the pathogenesis of acid-aspiration-induced ALI/ARDS. *Oncotarget.* 2017 Nov 28;9(2):1772-1784.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA