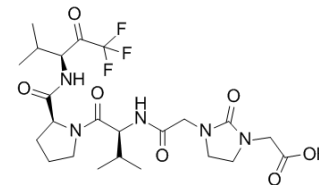


## AE-3763

Cat. No.:	HY-19406
CAS No.:	291778-77-3
Molecular Formula:	C <sub>23</sub> H <sub>34</sub> F <sub>3</sub> N <sub>5</sub> O <sub>7</sub>
Molecular Weight:	549.54
Target:	Elastase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the COA.



### BIOLOGICAL ACTIVITY

Description	AE-3763 is a peptide-based <b>human neutrophil elastase</b> inhibitor with an IC <sub>50</sub> of 29 nM.
IC <sub>50</sub> & Target	IC <sub>50</sub> : 29 nM (Human neutrophil elastase) <sup>[1]</sup>
In Vitro	AE-3763 exhibits potent in vitro inhibitory activity against human neutrophil elastase as well as extremely high solubility and stability in water <sup>[1]</sup> .
In Vivo	Edema and leukocytes infiltration into the lung are significantly inhibited by infusion of AE-3763. AE3763 significantly improves survival rate by 24 h in a mouse model of fatal shock associated with multiple organ dysfunction. AE-3763 dose-dependently prevents hemorrhage when given intravenously by infusion (ED <sub>50</sub> : 0.42 mg/kg/h) or by bolus injection (1.2 mg/kg). With regard to the toxicity of AE-3763 in mice, the results of a preliminary study have shown no overt toxic effect even at the high dose of 300 mg/kg, iv <sup>[1]</sup> .

### PROTOCOL

Animal Administration <sup>[1]</sup>	<p>Mice<sup>[1]</sup></p> <p>D-Galactosamine shock is induced in C3H/HeN mice (6-7 w, 22-25 g). AE-3763 (10 or 100 mg/kg) is administrated intraperitoneally six times at 2 h interval. Control animals receive the vehicle (PBS) instead of AE-3763. Animal's survival rate is observed up to 24 h after shock induction<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
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### REFERENCES

[1]. Inoue Y, et al. Development of a highly water-soluble peptide-based human neutrophil elastase inhibitor; AE-3763 for treatment of acute organ injury. *Bioorg Med Chem*. 2009 Nov 1;17(21):7477-86.

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

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