AE-3763

**Cat. No.:** HY-19406  
**CAS No.:** 291778-77-3  
**Molecular Formula:** C₂₃H₃₄F₃N₅O₇  
**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 **human neutrophil elastase** inhibitor with an IC₅₀ of 29 nM. |
| IC₅₀ & Target | IC₅₀: 29 nM (Human neutrophil elastase) [1] |

**In Vitro**  
AE-3763 exhibits potent in vitro inhibitory activity against human neutrophil elastase as well as extremely high solubility and stability in water [1].

**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 (ED₅₀: 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 [1].

### PROTOCOL

**Animal Administration [1]**  
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 [1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES
