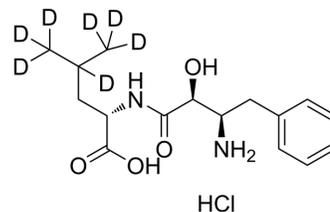


Bestatin-d₇ hydrochloride

Cat. No.:	HY-B0134AS
Molecular Formula:	C ₁₆ H ₁₈ D ₇ ClN ₂ O ₄
Molecular Weight:	351.88
Target:	Bacterial; Aminopeptidase; Antibiotic; Isotope-Labeled Compounds
Pathway:	Anti-infection; Metabolic Enzyme/Protease; Others
Storage:	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



BIOLOGICAL ACTIVITY

Description	Bestatin-d ₇ (hydrochloride) is deuterium labeled Bestatin (hydrochloride). Bestatin hydrochloride is an inhibitor of CD13 (Aminopeptidase N)/APN and leukotriene A4 hydrolase, used for cancer research.
IC₅₀ & Target	CD13
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Hossain A, et al. Protective effects of bestatin in the retina of streptozotocin-induced diabetic mice. *Exp Eye Res.* 2016 Aug;149:100-6
- [3]. Lis M, et al. The effects of bestatin on humoral response to sheep erythrocytes in non-treated and cyclophosphamide-immunocompromised mice. *Immunopharmacol Immunotoxicol.* 2013 Feb;35(1):133-8
- [4]. Poloz Y, et al. Bestatin inhibits cell growth, cell division, and spore cell differentiation in *Dictyostelium discoideum*. *Eukaryot Cell.* 2012 Apr;11(4):545-57
- [5]. Qian X, et al. Inhibition of p38 MAPK Phosphorylation Is Critical for Bestatin to Enhance ATRA-Induced Cell Differentiation in Acute Promyelocytic Leukemia NB4 Cells. *Am J Ther.* 2016 May-Jun;23(3):e680-9.

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

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