Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Pepstatin Trifluoroacetate

Catalog No: tcsc0021273

Available Sizes

Size: 10mg

Size: 50mg

Specifications

Formula:
$C_{36}H_{64}F_3N_5O_{11}$

Pathway:
Metabolic Enzyme/Protease;Metabolic Enzyme/Protease

Target:
Proteasome;HIV Protease

Purity / Grade:
>98%

Solubility:
DMSO : 32 mg/mL (40.00 mM; Need warming)

Alternative Names:
Pepstatin A Trifluoroacetate

Observed Molecular Weight:
799.92

Product Description

Pepstatin Trifluoroacetate is a specific **aspartic protease** inhibitor produced by actinomycetes, with **IC_{50}**s of 4.5 nM, 6.2 nM, 150 nM, 290 nM, 520 nM and 260 nM for hemoglobin-pepsin, hemoglobin-proctase, casein-pepsin, casein-proctase, casein-acid protease and hemoglobin-acid protease, respectively. Pepstatin Ammonium also inhibits HIV protease.

IC50 & Target: IC50: 4.5 nM (Hemoglobin-pepsin), 6.2 nM (Hemoglobin-proctase), 150 nM (Casein-pepsin), 260 nM (Hemoglobin-acid protease), 290 nM (Casein-proctase), 520 nM (Casein-acid protease)[1]

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

In Vitro: Pepstatin Trifluoroacetate is a specific acid protease inhibitor produced by actinomycetes, with IC_{50}s of 4.5 nM, 6.2 nM, 150 nM, 290 nM, 520 nM and 260 nM for hemoglobin-pepsin, hemoglobin-proctase, casein-pepsin, casein-proctase, casein-acid protease and hemoglobin-acid protease, respectively[1]. Pepstatin (Pepstatin A) inhibits the recombinant HIV protease with an IC_{50} of 250 μM. Pepstatin shows no effect on cellular protein synthesis and probably does not exert severe cell toxicity[2].

In Vivo: Pepstatin has a very low toxicity, with LD_{50}s of 1090 mg/kg, 875 mg/kg, 820 mg/kg and 450 mg/kg for mice, rats, rabbits, and dogs by i.p. route, and > 2000 mg/kg for all species by oral route. Pepstatin (0.5-50 mg/kg, p.o.) suppresses stomach ulceration of the pylorus in ligated Shay rats[1].