

Carfilzomib

Catalog No: tcsc0984



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g

Size: 2g

Size: 5g



Specifications

CAS No:

868540-17-4

Formula:

$C_{40}H_{57}N_5O_7$

Pathway:

Metabolic Enzyme/Protease;Autophagy

Target:

Proteasome;Autophagy

Purity / Grade:

>98%

Solubility:DMSO : 50 mg/mL (69.45 mM; Need ultrasonic); H₂O :**Alternative Names:**

PR-171

Observed Molecular Weight:

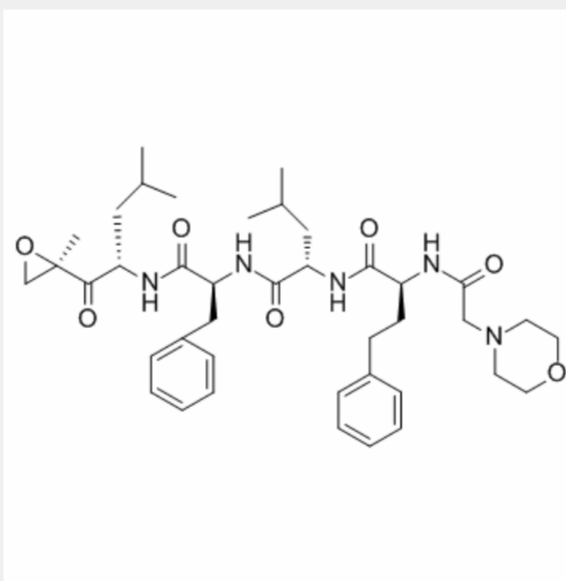
719.91

Product Description

Carfilzomib is an irreversible **proteasome** inhibitor with **IC₅₀** of IC₅₀ & Target: IC₅₀: 5 nM (Proteasome)

In Vitro: Carfilzomib displays preferential in vitro inhibitory potency against the ChT-L activity in the β5 subunit, with over 80% inhibition at doses of 10 nM and above and little or no effect on the PGPH and T-L activities at doses up to 100 nM. Carfilzomib decreases the viability of ANBL-6, RPMI 8226 cells, U266 and KAS-6/1 cells with an IC₅₀ less than 5 nM. Carfilzomib overcome Dex resistance, in that MM1.R cells reveals an IC₅₀ of 15.2 nM, less than the value of 29.3 nM for parental MM1.S cells^[1]. Co-treatment with carfilzomib and HDACIs leads to synergistic induction of cell death in various mantle cell lymphoma lines and primary mantle cell lymphoma cells. Combined treatment with carfilzomib or ONX0912 with vorinostat in HF-4B and Granta cells sharply increases caspase activation, PARP cleavage, JNK activation, MnSOD2 induction, and DNA damage^[2].

In Vivo: Carfilzomib (2.0 mg/kg, i.v.) in combination with 70 mg/kg vorinostat virtually abrogates tumor growth in Granta-luciferase cell xenograft flank model. Combined treatment results in a pronounced reduction in bioluminescence compared to animals treated with single agents or controls with minimal toxicity^[2].



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