

Product Name : Proteasome inhibitor IX

Synonyms : PS-IX; AM114

Cat No. : M27475

CAS Number : 856849-35-9

Molecular Formula : C₂₀H₂₁B₂NO₅

Formula Weight : 377.0

Chemical Name : —

Description : AM 114 is an inhibitor of chymotrypsin-like activity of the 20S proteasome (IC₅₀ ~1 μM). AM 114 shows potent anticancer activity. AM 114 exhibits HCT116 p53+/+ cells growth inhibitory activity (IC₅₀ = 1.49 μM). (In Vitro): AM114 exhibits potent activity against p53+/+ cells in colony formation assay, with an IC₅₀ value of 0.6 μM. AM114 treatment inhibits the chymotrypsin-like activity of the 20S proteasome in vitro, leading to a significant accumulation of ubiquitinated p53 and other cellular proteins in whole cells. In HCT116 p53+/+ cells, AM114 (0.1-10 μM) treatment causes a loss of cell survival in the p53+/+ and p53-/- cells by approximately 70 and 20%, respectively at a concentration of 1 μM.

Pathway : Proteasome/Ubiquitin

Target : Proteasome

Receptor : CRAC channel

Solubility : —

SMILES : O=C(C(CN(C)C)/1)=C\ C2=CC=C(B(O)O)C=C2)C1=C/C3=CC=C(B(O)O)C=C3

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Lanotte A, Mazzino A. Anisotropic nonperturbative zero modes for passively advected magnetic fields. Phys Rev E Stat Phys Plasmas Fluids Relat Interdiscip Topics. 1999 Oct; 60(4 Pt A):R3483-6.