

Torin 1

Catalog No: tcsc0237



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g



Specifications

CAS No:

1222998-36-8

Formula:

$C_{35}H_{28}F_3N_5O_2$

Pathway:

PI3K/Akt/mTOR;Autophagy

Target:

mTOR;Autophagy

Purity / Grade:

>98%

Solubility:

DMSO : 6.6 mg/mL (10.86 mM; Need ultrasonic and warming)

Observed Molecular Weight:

607.62

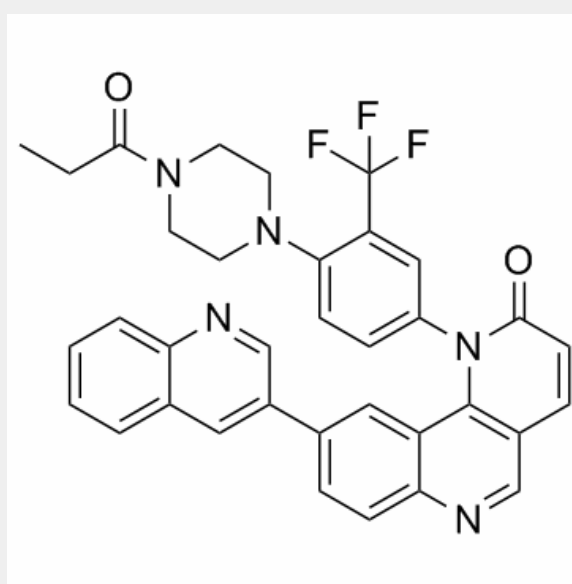
Product Description

Torin 1 is a potent inhibitor of **mTOR** with an **IC₅₀** of 3 nM. Torin 1 inhibits both **mTORC1/2** complexes with **IC₅₀** values between 2 and 10 nM.

IC₅₀ & Target: IC₅₀: 2-10 nM (mTORC1), 2-10 nM (mTORC2), 3 nM (mTOR), 0.6 μM (ATM), 1 μM (DNA-PK), 1.8 μM (PI3K-α), 3 μM (hVPS34)^[2]

In Vitro: Torin1 (250 nM) completely inhibits proliferation and causes a G1/S cell cycle arrest, and decreases cell size to a greater degree than 50 nM rapamycin in wild-type MEFs^[1]. Torin1 has more than 800-fold selectivity between mTOR and PI3Ks, and is very selective relative to other PIKK family kinases with the exception of DNA-PK^[2].

In Vivo: Torin1 (20 mg/kg, i.p.) is efficacious in a U87MG xenograft model, and demonstrates good pharmacodynamic inhibition of downstream effectors of mTOR in tumor and peripheral tissues^[2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!