

# 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

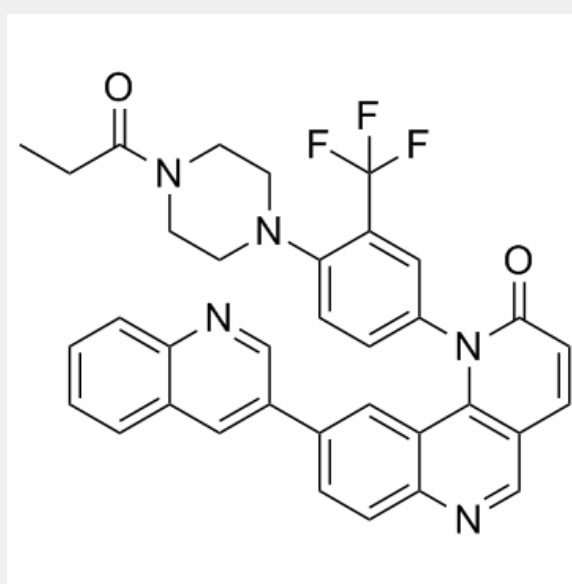
### Product Description

Torin 1 is a potent inhibitor of **mTOR** with an **IC<sub>50</sub>** of 3 nM. Torin 1 inhibits both **mTORC1/2** complexes with **IC<sub>50</sub>** 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)<sup>[2]</sup>

***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<sup>[1]</sup>. 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<sup>[2]</sup>.

***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<sup>[2]</sup>.



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