

Torin-1

Cat. # F6100, F6101

Also Known as: 1-[4-[4-(1-Oxopropyl)-1-piperazinyl]-3-(trifluoromethyl)phenyl]-9-(3-quinolinyl)-benzo[h]-1,6-naphthyridin-2(1H)-one

Formula: $C_{35}H_{28}F_3N_5O_2$

MW: 607.62 Da

CAS No.: 1222998-36-8

Source: Synthetic

Form: Lyophilized powder

Solubility: Soluble in DMSO up to 4 mg/mL when warming to 50 °C. Sonicate if needed.

Concentration: N/A

Quality Assurance: >99% by HPLC and NMR

Description: Torin 1-is a cell permeable highly potent, selective and ATP-competitive mTOR inhibitor of the mammalian target of rapamycin (mTOR) kinase. Torin-1 exhibits over 100-fold selectivity for mTOR over PI3K α and other PI3K-like kinases, as well as 450 other protein kinases. Torin-1 has been found to impair cell growth and proliferation through a mechanism involving mTORC1 inhibition other than mTORC2 inhibition, in which the rapamycin-resistant functions of mTORC1 is suppressed.

Storage: Eligible for room temperature shipping. Store at -20°C upon receiving; protect from air and light

How to Use Torin-1 was used at 2-5,000 nM in cell-based in vitro assays.

Literature:

1. Guertin DA, *et al.* (2009) *Sci.Signal.* 2(67):pe24
2. Thoreen CC, *et al.* (2009) *J.Biol.Chem.* 284(12):8023-32
3. Liu Q, *et al.* (2010) *J.Med.Chem.* 53(19):7146-55

