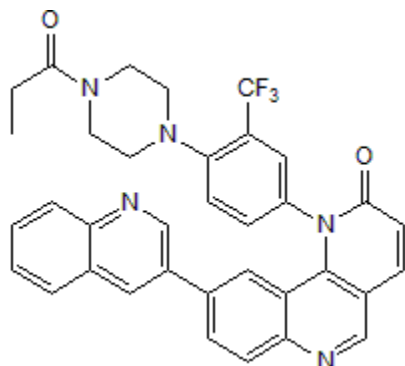


Torin 1

Cat. No. 4247



Chemical Name: 1-[4-[4-(1-Oxopropyl)-1-piperazinyl]-3-(trifluoromethyl)phenyl]-9-(3-quinolinyl)-benzo[*h*]-1,6-naphthyridin-2(1*H*)-one

Biological Activity

Potent and selective mTOR inhibitor ($IC_{50} = 2 - 10$ nM for mTORC1 and mTORC2). Displays 200-fold selectivity for mTOR over DNA-PK, ATM and hVps34. Induces autophagy in HeLa cells.

Licensing Information

Sold under license from Whitehead Institute for Biomedical Research.

Technical Data

M.Wt:

607.62

Formula:

$C_{35}H_{28}F_3N_5O_2$

Solubility:

Soluble to 1 mM in DMSO

Purity:

>98 %

Phone: (800) 343-7475 (612) 379-2956

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Email: customerservice@rndsystems.com

Storage:

Store at +4°C

CAS No:

1222998-36-8

The technical data provided above is for guidance only.
For batch specific data refer to the Certificate of Analysis.

References

Guertin and Sabatini (2009) The pharmacology of mTOR inhibition. *Sci.Signal.* **2** pe24. PMID: [19383975](#).

Thoreen et al (2009) An ATP-competitive mammalian target of rapamycin inhibitor reveals rapamycin-resistant functions of mTORC1. *J.Biol.Chem.* **284** 8023. PMID: [19150980](#).

Liu et al (2010) Discovery of 1-(4-(4-propionylpiperazin-1-yl)-3-(trifluoromethyl)phenyl)-9-(quinolin-3-yl)benzo[h][1,6]naphthyridin-2(1H)-one as a highly potent, selective mammalian target of rapamycin (mTOR) inhibitor for the treatment of cancer. *J.Med.Chem.* **53** 7146. PMID: [20860370](#).

Peterson et al (2011) mTOR complex 1 regulates lipin 1 localization to control the SREBP pathway. *Cell.* **146** 408. PMID: [21816276](#).

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