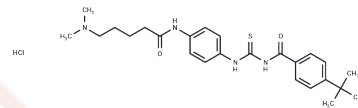


Tenovin-6 Hydrochloride

Chemical Properties

CAS No. :	1011301-29-3
Formula:	C ₂₅ H ₃₅ ClN ₄ O ₂ S
Molecular Weight:	491.09
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Tenovin-6 Hydrochloride is an SIRT1, SIRT2 and HDAC8 inhibitor (IC ₅₀ s of 21 μM, 10 μM, and 67 μM for SirT1, SirT2, and SirT3, respectively), and is also a potent p53 activator .
Targets(IC ₅₀)	HDAC, Autophagy, Dehydrogenase, p53, Sirtuin, MDM-2/p53
In vitro	Inhibition of SIRT1/2 by Tenovin-6 induced apoptosis in UM cells by activating the expression of tumor suppressor genes such as p53 and elevating reactive oxygen species (ROS). Tenovin-6 inhibited the growth of UM cells. Tenovin-6 and vinblastine was synergistic in inducing apoptosis of UM cell line 92.1 and Mel 270. Furthermore, Tenovin-6 eliminated cancer stem cells in 92.1 and Mel 270 cells. In conclusion, our findings suggest that Tenovin-6 may be a promising agent to kill UM bulk tumor cells and CSCs[1]. Tenovin-6 increases microtubule-associated protein 1 light chain 3 (LC3-II) level in diverse cell types in a time- and dose-dependent manner. Mechanistically, the increase of LC3-II by Tenovin-6 is caused by inhibition of the classical autophagy pathway via impairing lysosomal function without affecting the fusion between autophagosomes and lysosomes. Tenovin-6 activation of p53 is cell type dependent, and Tenovin-6 inhibition of autophagy is not dependent on its regulatory functions on p53 and SIRT1[2].

Solubility Information

Solubility	DMSO: 45 mg/mL (91.63 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0363 mL	10.1814 mL	20.3629 mL
5 mM	0.4073 mL	2.0363 mL	4.0726 mL
10 mM	0.2036 mL	1.0181 mL	2.0363 mL
50 mM	0.0407 mL	0.2036 mL	0.4073 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Dai W, et al. Class III-specific HDAC inhibitor Tenovin-6 induces apoptosis, suppresses migration and eliminates cancer stem cells in uveal melanoma. *Sci Rep.* 2016 Mar 4;6:22622.

Yuan H, et al. Tenovin-6 impairs autophagy by inhibiting autophagic flux. *Cell Death Dis.* 2017 Feb 9;8(2):e2608.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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