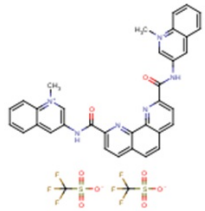
Data Sheet (Cat.No.T13817L)

TargetMol
A DRUG SCREENING EXPERT

Phen-DC3 Trifluoromethanesulfonate

Chemical Properties



CAS No.:	929895-45-4
Formula:	C36H26F6N6O8S2
Molecular Weight:	848.75
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Phen-DC3 Trifluoromethanesulfonate is a G-quadruplex (G4) specific ligand. It also can inhibit FANCJ and DinG helicases (IC50s: 65±6 and 50±10 nM, respectively).
Targets(IC_{50})	G4 substrate, FANCJ helicase: 65±6 nM G4 substrate, DinG helicases: 50±10 nM
In vitro	The CEB25-L111(T) array is stable in WT cells, it becomes unstable upon addition of Phen-DC3 Trifluoromethanesulfonate or deletion of PIF1. A CEB1-WT array is rather stable but undergoes frequent rearrangements upon addition of 10 μM Phen-DC3 Trifluoromethanesulfonate (Phen-DC3) in WT cells. It is found that the c-Myc allele displays significant destabilization upon Phen-DC3 Trifluoromethanesulfonate treatment and PIF1 deletion. It is also highly destabilized in the presence of Phen-DC3 Trifluoromethanesulfonate or in the absence of PIF1. The CEB1-loop CEB25 allele remaines fully stable in both PIF1-treated and WT cells[2].

Solubility Information

Solubility	DMSO: 34 mg/mL (40.06 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.178 mL	5.891 mL	11.782 mL
5 mM	0.236 mL	1.178 mL	2.356 mL
10 mM	0.118 mL	0.589 mL	1.178 mL
50 mM	0.024 mL	0.118 mL	0.236 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Sanjay Kumar Bharti, et al. Specialization among Iron-Sulfur Cluster Helicases to Resolve G-quadruplex DNA Structures That Threaten Genomic Stability. J Biol Chem. 2013 Sep 27; 288(39): 28217–28229.
2. Aurèle Piazza, et al. Short loop length and high thermal stability determine genomic instability induced by G-quadruplex-forming minisatellites. EMBO J. 2015 Jun 12; 34(12): 1718–1734.

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