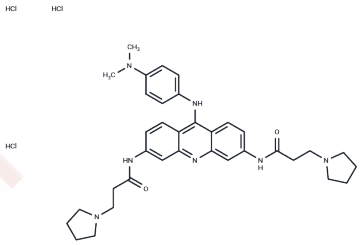
Data Sheet (Cat.No.T23819)

TargetMol

Braco-19 trihydrochloride

Chemical Properties



CAS No. : 1177798-88-7

Formula: C35H46Cl3N7O2

Molecular Weight: 703.14

Storage: Store at low temperature,Keep away from direct sunlight
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	Braco-19 trihydrochloride (BRACO19 3HCl) is an inhibitor of telomerase and prevents the capping and catalytic action of telomerase. Braco-19 trihydrochloride inhibits HAdV virus replication.
Targets(IC50)	DNA/RNA Synthesis,Telomerase,Virus Protease
In vitro	The IC50 for BRACO-19 trihydrochloride (1.0-10 μM) in UXF1138L cells is 2.5 μM, the IC100 is 5 μM. BRACO-19 trihydrochloride (1 μM) dramatically reduces the expression of nuclear hTERT[3]. BRACO-19 trihydrochloride (0-40 μM) dose-dependently decreases the AdV virus growth in eGFP-transinfected HEK 293 cells. BRACO-19 trihydrochloride (0-150 μM) decreases band intensity in an increasing concentration-dependent manner[4].
In vivo	In nude mice established UXF1138LX Xenografts, BRACO-19 trihydrochloride (2 mg/kg; i. p.) significantly inhibits tumor growth and shows marked single-agent antitumor activity. some animals in the group shows complete regressions (5 of 12 tumors)[3].

Solubility Information

Solubility	H2O: 19.8 mg/mL (28.16 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4222 mL	7.111 mL	14.2219 mL
5 mM	0.2844 mL	1.4222 mL	2.8444 mL
10 mM	0.1422 mL	0.7111 mL	1.4222 mL
50 mM	0.0284 mL	0.1422 mL	0.2844 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

Fleming AM, et al. Human DNA Repair Genes Possess Potential G-Quadruplex Sequences in Their Promoters and 5'-Untranslated Regions. Biochemistry. 2018 Feb 13;57(6):991-1002.
Machireddy B, et al. Probing the Binding Pathway of BRACO19 to a Parallel-Stranded Human Telomeric G-Quadruplex Using Molecular Dynamics Binding Simulation with AMBER DNA OL15 and Ligand GAFF2 Force Fields. J Chem Inf Model. 2017 Nov 27;57(11):2846-2864.
Angelika M Burger, et al. The G-quadruplex-interactive Molecule BRACO-19 Inhibits Tumor Growth, Consistent With Telomere Targeting and Interference With Telomerase Function. Cancer Res. 2005 Feb 15;65(4):1489-96.
Prativa Majee, et al. Genome-wide Analysis Reveals a Regulatory Role for G-quadruplexes During Adenovirus Multiplication. Virus Res. . 2020 Jul 2;283:197960.