

BMVC

Chemical Properties

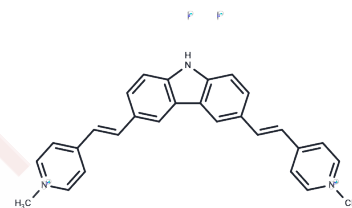
CAS No. : 627810-06-4

Formula: C₂₈H₂₅I₂N₃

Molecular Weight: 657.33

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	BMVC is a potent G-quadruplex (G4) stabilizer and a selective telomerase inhibitor (IC ₅₀ : ~0.2 μM) with anticancer activities, and it also inhibits Taq DNA polymerase (IC ₅₀ : ~2.5 μM).
Targets(IC ₅₀)	DNA/RNA Synthesis, Telomerase
In vitro	BMVC (0.5 μM; 0-18 days; H1299 cells) treatment significantly increases the percentage of sub-G1-phase cells after 18 days, leading to cessation of cell growth and cell death through apoptosis. Long-term BMVC treatment induces senescence, accompanied by progressive telomere shortening and DNA damage foci detection, indicating telomere uncapping [1].
In vivo	The treatment of BMVC (1 mg/kg; i.p.; every 3 day; BALB/cAnN.Cg-Foxn1nu/CrlNarl mice) delays tumorigenic potential of cancer cells in vivo [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5213 mL	7.6065 mL	15.2131 mL
5 mM	0.3043 mL	1.5213 mL	3.0426 mL
10 mM	0.1521 mL	0.7607 mL	1.5213 mL
50 mM	0.0304 mL	0.1521 mL	0.3043 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

Huang FC, et al. G-quadruplex stabilizer 3,6-bis(1-methyl-4-vinylpyridinium)carbazole diiodide induces accelerated senescence and inhibits tumorigenic properties in cancer cells. *Mol Cancer Res.* 2008 Jun;6(6):955-64.

Jen-Fei Chu, et al. A Novel Method for Screening G-quadruplex Stabilizers to Human Telomeres. *Journal of the Chinese Chemical Society*, 2011, 58, 296-300.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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