# Data Sheet (Cat.No.T10574)



#### **BMVC**

### **Chemical Properties**

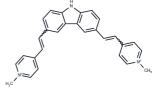
CAS No.: 627810-06-4

Formula: C28H25I2N3

Molecular Weight: 657.33

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



## **Biological Description**

| Description   | BMVC is a potent G-quadruplex (G4) stabilizer and a selective telomerase inhibitor (IC50: $\sim$ 0.2 $\mu$ M) with anticancer activities. BMVC inhibits Taq DNA polymerase (IC50: $\sim$ 2.5 $\mu$ M).   |  |  |
|---------------|--|--|--|
| Targets(IC50) | Telomerase   |  |  |
| In vitro      | BMVC (0.5 µM; 0-18 days; H1299 cells) treatment markedly increases the percentage of sub-G1-phase cells after 18 days and long-term treatment leads to ceasing cell growth and eventually cell death through apoptosis. The long-term BMVC treatment induces the senescence program in H1299 cells. The BMVC-induced senescence phenotype is accompanied by progressive telomere shortening and detection of the DNA damage foci, indicating that BMVC caused telomere uncapping after long-term treatments [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.

## 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.

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