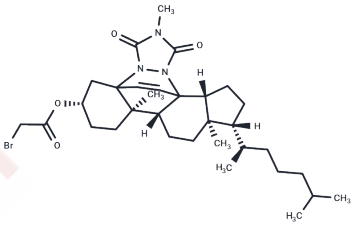
# Data Sheet (Cat.No.T70151)

MeTC7

## Chemical Properties



CAS No. : 1817841-22-7

Formula: C32H48BrN3O4

Molecular Weight: 618.65

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 | MeTC7 is a vitamin D receptor (VDR) antagonist with antitumor activity that inhibits PD-L1 and may inhibit the growth of xenografts and transgenic tumors in vivo. |
| Targets(IC50) | Vitamin |
| In vitro | MeTC7 disrupts the VDR-Ligand-binding domain in Silico. MeTC7 shows potent VDR inhibition activity with an IC50=2.9 μM. [1]<br>Treatment with 250 nM MeTC7 for 18 h was able to inhibit the expression of RXRα and Importin-4 and induce PARP1 cleavage, thereby inhibiting the viability of ovarian cancer cells. [1] |
| In vivo | By intraperitoneal injection of 10 mg/kg MeTC7 was able to inhibit the growth of spontaneous transgenic TH-MYCN neuroblastoma and xenograft tumors in vivo. [1] |

## Solubility Information

| | |
|---|---|
| Solubility | DMSO: 20 mg/mL (32.33 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+90% Corn Oil: 1 mg/mL (1.62 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.6164 mL | 8.0821 mL | 16.1642 mL |
| 5 mM | 0.3233 mL | 1.6164 mL | 3.2328 mL |
| 10 mM | 0.1616 mL | 0.8082 mL | 1.6164 mL |
| 50 mM | 0.0323 mL | 0.1616 mL | 0.3233 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

Khazan N, et al. Identification of a Vitamin-D Receptor Antagonist, MeTC7, which Inhibits the Growth of Xenograft and Transgenic Tumors In Vivo. J Med Chem. 2022 Apr 28;65(8):6039-6055.