Product Data Sheet

METTL1-WDR4-IN-2

Cat. No.: HY-162082 CAS No.: 2919742-07-5 Molecular Formula: $C_{24}H_{23}N_5O_6S$

Molecular Weight: 509.53

Target: DNA Methyltransferase

Pathway: **Epigenetics**

Storage: Powder -20°C 3 years

2 years

-80°C In solvent 6 months

> -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (196.26 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent Mass Concentration | 1 mg | 5 mg | 10 mg |
|------------------------------|-------------------------------|-----------|-----------|------------|
| | 1 mM | 1.9626 mL | 9.8130 mL | 19.6259 mL |
| | 5 mM | 0.3925 mL | 1.9626 mL | 3.9252 mL |
| | 10 mM | 0.1963 mL | 0.9813 mL | 1.9626 mL |

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (4.91 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (4.91 mM); Clear solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (4.91 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

METTL1-WDR4-IN-2 (compound 6) is a selective methyltransferase Like 1 (METTL1)-WDR4 inhibitor with an IC₅₀ of 41 μM. METTL1-WDR4-IN-2 shows remarkable selectivity against METTL3-14 and slightly selective also against METTL16^[1].

REFERENCES

| 1]. Francesco Nai, et al. Small-Molecule Inhibitors of the m7G-RNA Writer METTL1. ACS Bio Med Chem Au 2023. | | | | | | | |
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Page 2 of 2 www.MedChemExpress.com