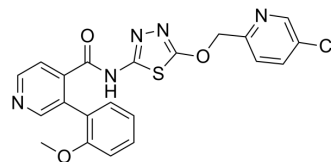


## PolQi2

|                    |   |       |          |
|--------------------|---|-------|----------|
| Cat. No.:          | HY-150279   |       |          |
| CAS No.:           | 2565638-16-4  |       |          |
| Molecular Formula: | C <sub>21</sub> H <sub>16</sub> ClN <sub>5</sub> O <sub>3</sub> S |       |          |
| Molecular Weight:  | 453.9   |       |          |
| Target:            | DNA/RNA Synthesis   |       |          |
| Pathway:           | Cell Cycle/DNA Damage   |       |          |
| Storage:           | Powder  | -20°C | 3 years  |
|                    |   | 4°C   | 2 years  |
|                    | In solvent  | -80°C | 6 months |
|                    |   | -20°C | 1 month  |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (220.31 mM; ultrasonic and warming and heat to 80°C)

| Concentration             | Solvent | Mass      |            |            |
|---------------------------|---------|-----------|------------|------------|
|                           |         | 1 mg      | 5 mg       | 10 mg      |
| Preparing Stock Solutions | 1 mM    | 2.2031 mL | 11.0156 mL | 22.0313 mL |
|                           | 5 mM    | 0.4406 mL | 2.2031 mL  | 4.4063 mL  |
|                           | 10 mM   | 0.2203 mL | 1.1016 mL  | 2.2031 mL  |

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: 2.5 mg/mL (5.51 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: 2.5 mg/mL (5.51 mM); Clear solution; Need ultrasonic

### BIOLOGICAL ACTIVITY

#### Description

PolQi2 inhibits the helicase activity of Polθ. PolQi2 improves the precision of gene editing at various loci and in different cell lines<sup>[1]</sup>.

### REFERENCES

- [1]. Imberger S, et al. Simultaneous inhibition of DNA-PK and Polθ improves integration efficiency and precision of genome editing. Nat Commun. 2023 Aug 14;14(1):4761.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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