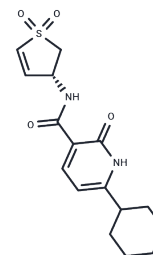


GSK_WRN4

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 2923008-66-4 |
| Formula: | C16H20N2O4S |
| Molecular Weight: | 336.41 |
| 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 | GSK_WRN4 is a WRN helicase inhibitor with anticancer activity. It induces DNA double-strand breaks and inhibits MSI tumor cell growth, making it useful in cancer research. |
| Targets(IC50) | DNA/RNA Synthesis |
| In vitro | GSK_WRN4 significantly inhibited WRN helicase activity with pIC50 value of 7.6. GSK_WRN4 (0.1-20 μM, 1.5-144h) treated SW48 cells in a time - and dose-dependent manner. [1] |
| In vivo | In a xenografted mouse model of colorectal cancer cell lines, dose-dependent tumor growth inhibition was observed by oral administration of GSK_WRN4 (30, 100, 300 mpk), and tumor growth was completely inhibited at the highest dose supported by favorable pharmacokinetics. Morphological and pathological analysis of explants showed that GSK_WRN4 treatment resulted in a decrease in SW48 tumor cell density, accompanied by increased stromal and extracellular matrix deposition. [1] |

Solubility Information

| | |
|---------------------|---|
| Solubility | DMSO: 80 mg/mL (237.81 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (9.81 mM), Sonication is recommended. <i>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.</i> |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|------------|------------|-------------|
| 1 mM | 2.9726 mL | 14.8628 mL | 29.7256 mL |
| 5 mM | 0.5945 mL | 2.9726 mL | 5.9451 mL |
| 10 mM | 0.2973 mL | 1.4863 mL | 2.9726 mL |
| 50 mM | 0.0595 mL | 0.2973 mL | 0.5945 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

Picco G, et al. Novel WRN Helicase Inhibitors Selectively Target Microsatellite-Unstable Cancer Cells. *Cancer Discov.* 2024 Aug 2;14(8):1457-1475.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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