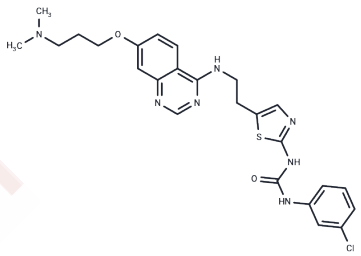
# Data Sheet (Cat.No.T10592)

BPR1K871

## Chemical Properties



CAS No. : 2443767-35-7

Formula: C25H28ClN7O2S

Molecular Weight: 526.05

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 | BPR1K871, a preclinical development candidate for anti-cancer therapy [1], is a potent, selective dual inhibitor targeting FLT3 and AURKA, with IC50 values of 19 nM and 22 nM, respectively. |
| Targets(IC50) | FLT |
| In vitro | BPR1K871 demonstrates strong anti-proliferative effects on MOLM-13 and MV4-11 AML cells, achieving an EC50 of approximately 5 nM [1]. |
| In vivo | BPR1K871, a multi-kinase inhibitor, is utilized for the treatment of acute myeloid leukemia (AML) and solid tumors [1]. |

## Solubility Information

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|---|---|
| Solubility | DMSO: 125 mg/mL (237.62 mM),Sonication is recommended.<br>(< 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 (6.27 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 | 1.901 mL | 9.5048 mL | 19.0096 mL |
| 5 mM | 0.3802 mL | 1.901 mL | 3.8019 mL |
| 10 mM | 0.1901 mL | 0.9505 mL | 1.901 mL |
| 50 mM | 0.038 mL | 0.1901 mL | 0.3802 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

Hsu YC, et al. Discovery of BPR1K871, a quinazoline based, multi-kinase inhibitor for the treatment of AML and solid tumors: Rational design, synthesis, in vitro and in vivo evaluation. 2016 Dec 27; 7(52): 86239-86256.