SHP2-IN-9

Cat. No.: HY-115925

Molecular Formula: $C_{20}H_{20}FN_3O_2S$

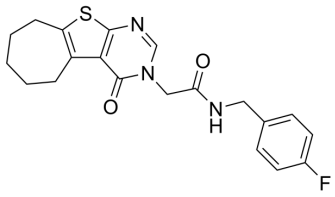
Molecular Weight: 385.46

Target: Phosphatase; SHP2

Pathway: Metabolic Enzyme/Protease; Protein Tyrosine Kinase/RTK

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 : 33.33 mg/mL (86.47 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.5943 mL	12.9715 mL	25.9430 mL
5 mM	0.5189 mL	2.5943 mL	5.1886 mL
10 mM	0.2594 mL	1.2972 mL	2.5943 mL

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

BIOLOGICAL ACTIVITY

Description

SHP2-IN-9 is a specific SHP2 inhibitor (IC_{50} =1.174 μM) with enhanced blood–brain barrier penetration. SHP2-IN-9 shows 85-fold more selective for SHP2 than SHP1. SHP2-IN-9 inhibits SHP2-mediated cell signal transduction and cancer cell proliferation, and inhibits the growth of cervix cancer tumors and glioblastoma growth in vivo[1].

In Vitro

SHP2-IN-9 (compound 2) could effectively inhibit SHP2-mediated cell signaling pathways in cancer (cervix cancer, human pancreatic cancer, large cell lung cancer and mouse glioma cell) by inhibiting the phosphorylation of Paxillin, affecting the regulation of the PI3K/AKT pathway and cell proliferation by causing the cell cycle arrest and inducing the early apoptosis[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ma Y, et al. Structure-based discovery of a specific SHP2 inhibitor with enhanced blood-brain barrier penetration from PubChem database. Bioorg Chem. 2022;121:105648.

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

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