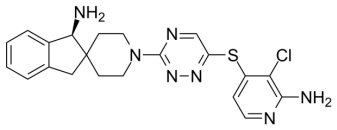
PF-07284892

Cat. No.:	HY-153740
CAS No.:	2498597-94-5
Molecular Formula:	$C_{21}H_{22}ClN_7S$
Molecular Weight:	439.96
Target:	SHP2
Pathway:	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 : 100 mg/mL (227.29 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2729 mL	11.3647 mL	22.7293 mL
	5 mM	0.4546 mL	2.2729 mL	4.5459 mL
	10 mM	0.2273 mL	1.1365 mL	2.2729 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 (5.68 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 (5.68 mM); Clear solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.5 mg/mL (5.68 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

PF-07284892 (ARRY-558) is a potent and orally active SHP2 inhibitor with an IC_{50} value of 21 nM. PF-07284892 decreases the expression of pERK[1][2].

IC_{50} & Target

IC_{50}: 21 nM (SHP2)[1]

In Vitro

PF-07284892 (100 nM; 4, 18 h) combines with lorlatinib (0-450 nM), binimetinib (0-160 nM) decreases the expression of pERK in H3122 lorR-06, VACO-432 cells[2].

	MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	PF-07284892 (10 mg/kg; p.o.) shows good oral bioavailability with F% of 85%, 94%, 102%, 64% for mouse, rat, dog, monkey, respectively[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Abdayem P, et al. Ongoing progress in BRAF-mutated non-small cell lung cancer. Clin Adv Hematol Oncol. 2022 Nov;20(11):662-672.

[2]. Drilon A, et al. SHP2 Inhibition Sensitizes Diverse Oncogene-Addicted Solid Tumors to Re-treatment with Targeted Therapy. Cancer Discov. 2023 Jun 3:OF1-OF13.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA