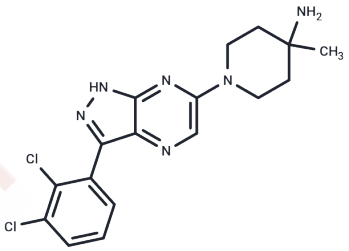
Data Sheet (Cat.No.T9196)

TargetMol

IACS-13909

Chemical Properties



CAS No. : 2160546-07-4

Formula: C17H18Cl2N6

Molecular Weight: 377.27

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	IACS-13909 (BBP-398), a specific and potent allosteric inhibitor of SHP2, that suppresses signaling through the MAPK pathway.
Targets(IC50)	Phosphatase
In vitro	IACS-13909 potently impeded proliferation of tumors harboring a broad spectrum of activated RTKs as the oncogenic driver.
In vivo	In EGFR-mutant osimertinib-resistant NSCLC models with EGFR-dependent and EGFR-independent resistance mechanisms, IACS-13909, administered as a single agent or in combination with osimertinib, potently suppressed tumor cell proliferation?in vitro?and caused tumor regression?in vivo.

Solubility Information

Solubility	DMSO: 9 mg/mL (23.86 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: 1 mg/mL (2.65 mM),Sonication is recommended. *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	2.6506 mL	13.2531 mL	26.5062 mL
5 mM	0.5301 mL	2.6506 mL	5.3012 mL
10 mM	0.2651 mL	1.3253 mL	2.6506 mL
50 mM	0.053 mL	0.2651 mL	0.5301 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

Yuting Sun, et al. Allosteric SHP2 Inhibitor, IACS-13909, Overcomes EGFR-Dependent and EGFR-Independent Resistance Mechanisms toward Osimertinib. Cancer Res. 2020 Nov 1;80(21).4840-4853.