Crizotinib-d_5

Cat. No.: HY-50878S

CAS No.: 1395950-84-1

Molecular Formula: $C_{21}H_{17}D_5Cl_2FN_5O$

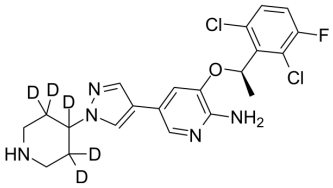
Molecular Weight: 455.37

Target: c-Met/HGFR; ROS Kinase; Autophagy; Anaplastic lymphoma kinase (ALK)

Pathway: Protein Tyrosine Kinase/RTK; Autophagy

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 : 20 mg/mL (43.92 mM; ultrasonic and warming and heat to 60°C)
H2O : 0.1 mg/mL (0.22 mM; Need ultrasonic)

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
1 mM	2.1960 mL	10.9801 mL	21.9602 mL
5 mM	0.4392 mL	2.1960 mL	4.3920 mL
10 mM	0.2196 mL	1.0980 mL	2.1960 mL

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

BIOLOGICAL ACTIVITY

Description

Crizotinib-d_5 is the deuterium labeled Crizotinib. Crizotinib (PF-02341066) is an orally bioavailable, ATP-competitive ALK and c-Met inhibitor with IC_{50}s of 20 and 8 nM, respectively. Crizotinib inhibits tyrosine phosphorylation of NPM-ALK and tyrosine phosphorylation of c-Met with IC_{50}s of 24 and 11 nM in cell-based assays, respectively. Crizotinib is also a ROS1 inhibitor. Crizotinib has effective tumor growth inhibition[1][2][3].

In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1].

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

REFERENCES

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