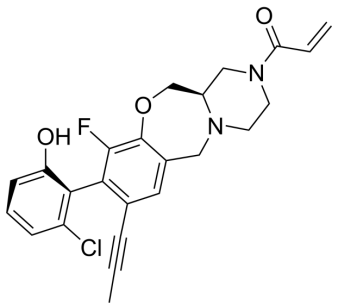
AZD4747

Cat. No.:	HY-154959
CAS No.:	2489226-14-2
Molecular Formula:	$C_{24}H_{22}ClFN_2O_3$
Molecular Weight:	440.89
Target:	Ras
Pathway:	GPCR/G Protein; MAPK/ERK Pathway
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 : 250 mg/mL (567.03 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.2681 mL	11.3407 mL	22.6814 mL
5 mM	0.4536 mL	2.2681 mL	4.5363 mL
10 mM	0.2268 mL	1.1341 mL	2.2681 mL

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

BIOLOGICAL ACTIVITY

Description

AZD4747 is a selective, blood-brain barrier-permeable mutant GTPase $KRAS^{G12C}$ inhibitor. AZD4747 has the potential to study cancer[1].

IC_{50} & Target

$KRAS^{G12C}$[1].

In Vivo

AZD4747 (1.1-2.3 μM/kg (i.v.); 2.3-6.8 μM/kg (p.o.); single) shows clearances of moderate to high, with 52 and 75% of hepatic blood flow for the mouse and rat, respectively[1].

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

Animal Model:	Male CD1 mice, male Wistar Han rats[1].
Dosage:	Mouse: 2.3 μM/kg (i.v.); 6.8 μM/kg (p.o.); Rat: 1.1-2.3 μM/kg (i.v.); 6.8 μM/kg (p.o.).

Administration:	i.v. and p.o.
Result:	Pharmacokinetic Parameters of AZD4747 in Cross Species[1].

	Mouse		Rat	
	IV[a]	PO[a]	IV[a]	PO[a]
Eh (%)	52		75	
V_{ss} (L/kg)	2.9		1.7	
$T_{1/2}$ (h)	0.63		0.56	
F%		58		18

Note:
a: 5% DMSO, 95% SBE-B-CD (30% w/v) in water.

REFERENCES

[1]. Kettle JG, et al. Discovery of AZD4747, a Potent and Selective Inhibitor of Mutant GTPase KRASG12C with Demonstrable CNS Penetration. J Med Chem. 2023 Jul 13;66(13):9147-9160.

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