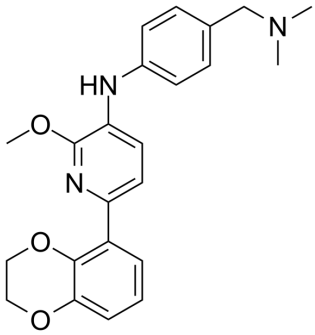
RAS inhibitor Abd-7

Cat. No.:	HY-122862
CAS No.:	2351843-48-4
Molecular Formula:	$C_{23}H_{25}N_3O_3$
Molecular Weight:	391.46
Target:	Ras
Pathway:	GPCR/G Protein
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (319.32 mM; Need ultrasonic)
H_2O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.5545 mL	12.7727 mL	25.5454 mL
	5 mM	0.5109 mL	2.5545 mL	5.1091 mL
	10 mM	0.2555 mL	1.2773 mL	2.5545 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: ≥ 2.08 mg/mL (5.31 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.08 mg/mL (5.31 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.31 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

RAS inhibitor Abd-7, a potent RAS-binding compound (K_d=51 nM), is a RAS-effector protein-protein interaction (PPI) inhibitor. RAS inhibitor Abd-7 interacts with RAS inside the cells, prevents RAS-effector interactions and inhibits endogenous RAS-dependent signaling. RAS inhibitor Abd-7 impairs the PPI of various mutant KRAS proteins with PI3K, CRAF and RALGDS as well as NRAS Q61H and HRAS G12V[1].

In Vitro

RAS inhibitor Abd-7 (0-20 μM; 24-48 hours) is a cell-potent inhibitor affecting the viability of cancer cell lines in a single digit

to low micromolar range[1].

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

Cell Viability Assay[1]

Cell Line:	DLD-1 cells, HT1080 cells
Concentration:	0-20 μM
Incubation Time:	24-48 hours
Result:	The IC_{50} of 8 μM in DLD-1 and 10 μM in HT1080 at 72 h (similar values for the IC_{50} were found after 48 h).

CUSTOMER VALIDATION

- Int J Oral Sci. 2022 Apr 1;14(1):18.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Quevedo CE, et al. Small molecule inhibitors of RAS-effector protein interactions derived using an intracellular antibody fragment. Nat Commun. 2018;9(1):3169. Published 2018 Aug 9.

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