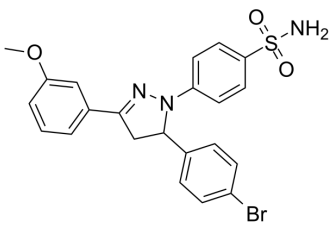
CID44216842

Cat. No.:	HY-136379
CAS No.:	1222513-26-9
Molecular Formula:	$C_{22}H_{20}BrN_3O_3S$
Molecular Weight:	486.38
Target:	Ras
Pathway:	GPCR/G Protein
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 (514.00 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.0560 mL	10.2800 mL	20.5601 mL
	5 mM	0.4112 mL	2.0560 mL	4.1120 mL
	10 mM	0.2056 mL	1.0280 mL	2.0560 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (4.28 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (4.28 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CID44216842 (Cdc42-IN-1) is a potent Cdc42-selective guanine nucleotide binding lead inhibitor. The EC_{50}s for Cdc42 WT and Cdc42Q61L mutant are 1.0 and 1.2 μM in GTP binding assay, respectively. The EC_{50}s for Cdc42 WT and Cdc42Q61L mutant are 0.3 and 0.5 μM in GDP binding assay, respectively. Use as a molecular probe[1].

IC_{50} & Target

EC50: 1.0 μM (Cdc42 WT, in GTP binding assay) and 1.2 μM (Cdc42Q61L mutant, in GTP binding assay)[1]
EC50: 0.3 μM (Cdc42 WT, in GDP binding assay) and 0.5 μM (Cdc42Q61L mutant, in GDP binding assay)[1]

In Vitro

CID44216842 inhibits GTP binding to both Cdc42 and its mutant in a dose-dependent manner. The inhibition is specific toward Cdc42 with no effects on other GTPases including Rac and Rho in the same family[1].

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

REFERENCES

[1]. Lin Hong, et al. Characterization of a Cdc42 Protein Inhibitor and Its Use as a Molecular Probe. J Biol Chem. 2013 Mar 22;288(12):8531-43.

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