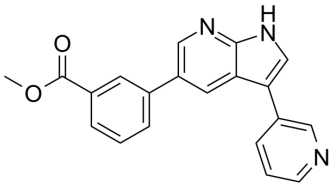
BSc5367

Cat. No.:	HY-144425
CAS No.:	3029584-84-4
Molecular Formula:	$C_{20}H_{15}N_3O_2$
Molecular Weight:	329.35
Target:	Others
Pathway:	Others

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 : 10 mg/mL (30.36 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.0363 mL	15.1814 mL	30.3628 mL
	5 mM	0.6073 mL	3.0363 mL	6.0726 mL
	10 mM	0.3036 mL	1.5181 mL	3.0363 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: ≥ 1 mg/mL (3.04 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 1 mg/mL (3.04 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1 mg/mL (3.04 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BSc5367 is a potent Nek1 inhibitor with an IC_{50} of 11.5 nM. NIMA-related protein kinase Nek1 is crucially involved in cell cycle regulation, DNA repair and microtubule regulation and dysfunctions of Nek1 play key roles in amyotrophic lateral sclerosis (ALS), polycystic kidney disease (PKD) and several types of radiotherapy resistant cancer[1].

REFERENCES

[1]. Pilakowski J, et al. Design, synthesis and biological evaluation of novel aminopyrazole- and 7-azaindole-based Nek1 inhibitors and their effects on zebrafish kidney development. Bioorg Med Chem Lett. 2021;53:128418.

Caution: Product has not been fully validated for medical applications. For research use only.

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