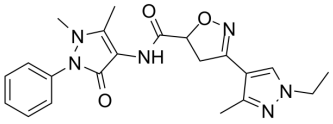
ISPA-28

Cat. No.:	HY-109987
CAS No.:	1006335-39-2
Molecular Formula:	$C_{21}H_{24}N_6O_3$
Molecular Weight:	408.45
Target:	Parasite
Pathway:	Anti-infection
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (244.83 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.4483 mL	12.2414 mL	24.4828 mL
	5 mM	0.4897 mL	2.4483 mL	4.8966 mL
	10 mM	0.2448 mL	1.2241 mL	2.4483 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: ≥ 2.5 mg/mL (6.12 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

ISPA-28 is a specific plasmodial surface anion channel (PSAC) antagonist. ISPA-28 binds directly and reversibly to CLAG3[1][2] .

In Vitro

ISPA-28 is only effective as an inhibitor of Dd2 channels ($K_{0.5}$ values of 56 nM and 43 μM for Dd2 and HB3 channels, respectively)[2].

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

REFERENCES

[1]. Sanjay A Desai, et al. Ion and Nutrient Uptake by Malaria Parasite-Infected Erythrocytes.

[2]. Wang Nguitragool, et al. Proteolysis at a Specific Extracellular Residue Implicates Integral Membrane CLAG3 in Malaria Parasite Nutrient Channels.

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