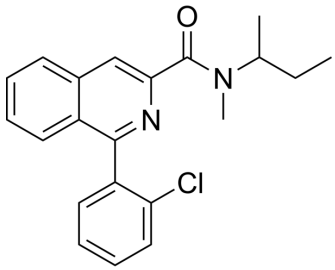
PK 11195

Cat. No.:	HY-19567
CAS No.:	85532-75-8
Molecular Formula:	$C_{21}H_{21}ClN_2O$
Molecular Weight:	352.86
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 : 25 mg/mL (70.85 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8340 mL	14.1699 mL	28.3399 mL
	5 mM	0.5668 mL	2.8340 mL	5.6680 mL
	10 mM	0.2834 mL	1.4170 mL	2.8340 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 (5.89 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (5.89 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

PK 11195 (RP 52028) is a ligand of translocator protein (TSPO), which targets Leishmania chemotherapy, with IC_{50}s of 14.2 μM, 8.2 μM, 3.5 μM for L. amazonensis, L. major and L. braziliensis, respectively.

IC_{50} & Target

Leishmania

In Vitro

Median IC_{50} values for PK 11195 are 14.2 μM for L. amazonensis, 8.2 μM for L. major, and 3.5 μM for L. braziliensis. The selective index value for L. amazonensis is 13.7, indicating the safety of PK 11195 for future testing in mammals. Time-and dose-dependent reductions in the percentage of infected macrophages, the number of parasites per infected macrophage, and the number of viable intracellular parasites are observed. Electron microscopy reveals some morphological alterations suggestive of autophagy. Interestingly, MCP-1 and superoxide levels are reduced in L. amazonensis-infected macrophages treated with PK 11195[1].

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

CUSTOMER VALIDATION

- Exp Neurol. 2023 Sep 15;114542.
- J Inflamm. 2024 Apr 19;21(1):11.

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REFERENCES

[1]. Guedes CES, et al. In vitro evaluation of the anti-leishmanial activity and toxicity of PK-11195. Mem Inst Oswaldo Cruz. 2018 Feb 5;113(4):e170345.

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