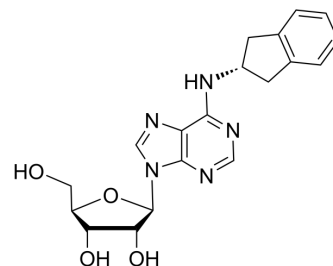


PD 117519

Cat. No.:	HY-100032		
CAS No.:	96392-15-3		
Molecular Formula:	C ₁₉ H ₂₁ N ₅ O ₄		
Molecular Weight:	383.4		
Target:	Adenosine Receptor		
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 : ≥ 100 mg/mL (260.82 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
	1 mM		2.6082 mL	13.0412 mL	26.0824 mL
	5 mM		0.5216 mL	2.6082 mL	5.2165 mL
	10 mM		0.2608 mL	1.3041 mL	2.6082 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (6.52 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (6.52 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

PD 117519 (CI947) is an A_{2A} adenosine agonist which has shown oral antihypertensive activity in pharmacological animal models^{[1][2]}.

IC₅₀ & Target

A_{2A} adenosine^[1]

In Vivo

PD 117519 (2-10 mg/kg; oral administration; 16-24 hours; male beagle dogs) treatment produces significant hemodynamic changes at T_{max} (4 hours) follows by acute coronary vascular injury that is evident at 16 hours postdosing. Treatment with 2 or 10 mg/kg of PD 117519 produces significant increases in mean heart rate and decreases in mean indirect systolic blood pressure at time of highest drug exposure, 4 hours postdosing^[3].

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

Animal Model:	24 male beagle dogs (8-12 months old) ^[3]
Dosage:	2 mg/kg or 10 mg/kg
Administration:	Oral administration; 16 hours and 24 hours
Result:	Increased in mean heart rate and decreased in mean indirect systolic blood pressure at time of highest drug exposure. Induced acute coronary arteriopathy. The endothelium also appears injured.

REFERENCES

- [1]. Reynolds DL, et al. Liquid chromatographic analysis of the adenosine agonist PD 117519 in dog plasma. J Pharm Biomed Anal. 1991;9(4):345-9.
- [2]. Tobin GA, et al. The role of eNOS phosphorylation in causing drug-induced vascular injury. Toxicol Pathol. 2014 Jun;42(4):709-24.
- [3]. Enerson BE, et al. Acute drug-induced vascular injury in beagle dogs: pathology and correlating genomic expression. Toxicol Pathol. 2006;34(1):27-32.
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Caution: Product has not been fully validated for medical applications. For research use only.

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