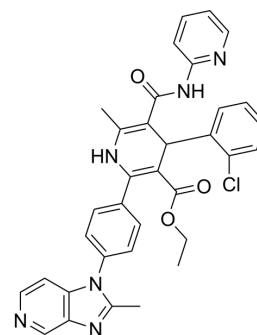


(Rac)-Modipafant

Cat. No.:	HY-108908		
CAS No.:	122956-68-7		
Molecular Formula:	C ₃₄ H ₂₉ ClN ₆ O ₃		
Molecular Weight:	605.09		
Target:	Flavivirus; Dengue virus		
Pathway:	Anti-infection		
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 : 50 mg/mL (82.63 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	1.6526 mL	8.2632 mL	16.5265 mL
	5 mM	0.3305 mL	1.6526 mL	3.3053 mL
	10 mM	0.1653 mL	0.8263 mL	1.6526 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 (4.13 mM); Clear solution			

BIOLOGICAL ACTIVITY

Description	(Rac)-Modipafant (UK-74505) is an orally active, selective, long-acting irreversible platelet activating factor receptor (PAFR) antagonist. (Rac)-Modipafant prevents dengue infection ^{[1][2][3]} .
In Vivo	(Rac)-Modipafant (UK-74505) (10 mg/kg; p.o.; twice a day until day 10) prevents Severe Dengue Infection ^[3] . (Rac)-Modipafant exhibits highly selective, time-dependent inhibition of PAF-induced aggregation of rabbit washed platelets (IC ₅₀ =26.3 and 1.12 nM after 0.25 and 60 min preincubation, respectively) ^[4] . (Rac)-Modipafant (5-20 mg/kg; p.o.) dose-dependently inhibits the Zymosan -induced articular hyperalgesia ^[5] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
	Animal Model:

Dosage:	10 mg/kg
Administration:	P.o.; twice a day (started on days 0, 3, 5, or 7) until day 10
Result:	Decreased by approximately 50% the lethality associated with DEN-2 infection.
Animal Model:	Male BALB/C (8- to 10- week-old) wild-type mice ^[5]
Dosage:	5, 10 and 20 mg/kg
Administration:	P.o.
Result:	Dose-dependently inhibited the Zymosan -induced articular hyperalgesia.

REFERENCES

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- [4]. Guerrero AT, et al. The role of PAF/PAFR signaling in zymosan-induced articular inflammatory hyperalgesia [published correction appears in *Naunyn Schmiedebergs Arch Pharmacol.* 2013 Apr;386(4):351. Zaperlon, Ana C [corrected to Zarpelon, Ana C]]. *Naunyn Schmiedebergs Arch Pharmacol.* 2013;386(1):51-59.
- [5]. Souza DG, et al. Essential role of platelet-activating factor receptor in the pathogenesis of Dengue virus infection. *Proc Natl Acad Sci U S A.* 2009;106(33):14138-14143.

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

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