

## Product Data Sheet

Product Name: (Rac)-Modipafant

Cat. No.: GC60412

### Chemical Properties

Cas. No. 122956-68-7

SMILES O=C(C1=C(C2=CC=C(N3C(C)=NC4=C3C=CN=C4)C=C2)NC(C)=C(C(NC5=NC=CC=C5)=O)C1C6=CC=CC=C6Cl)OCCFormula C<sub>34</sub>H<sub>29</sub>ClN<sub>6</sub>O<sub>3</sub>

M.Wt 605.09

Solubility DMSO : 50 mg/mL (82.63 mM; Need ultrasonic)

Storage Store at -20°C

General For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure (Rac)-Modipafant

### Background

(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].

(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<sub>50</sub>=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]. Animal Model: 8- to 10-week-old BALB/c mice (DEN-2 strain infected)[3]

[1]. O'Connor BJ, et al. Inhibitory effect of UK,74505, a potent and specific oral platelet activating factor (PAF) receptor antagonist, on airway and systemic responses to inhaled PAF in humans. *Am J Respir Crit Care Med.* 1994;150(1):35-40. [2]. Alabaster VA, et al. UK-74,505, a novel and selective PAF antagonist, exhibits potent and long lasting activity in vivo. *Agents Actions Suppl.* 1991;34:221-227. [3]. Parry MJ, Alabaster VA, et al. Pharmacological profile of UK-74,505, a novel and selective PAF antagonist with potent and prolonged oral activity. *J Lipid Mediat Cell Signal.* 1994;10(3):251-268. [4]. 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. [5]. 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.

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

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