
Product Data Sheet

Product Name: Nosantine racemate (NPT-15392 racemate)

Cat. No.: GC33873

Chemical Properties

Cas. No. 75166-67-5

SMILES O=C1N=CNC2=C1N=CN2C(C(O)C)CCCCCFormula $C_{14}H_{22}N_4O_2$ M.Wt 278.35

Solubility Soluble in DMSO Storage Store at -20°C

General tips 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 **Protocol****Animal experiment:**

Rats[2] Animals in seven of the groups are also injected subcutaneously with various dosage regimens of the immunomodulating drugs, isoprinosine (ISO), Nosantine (NPT 15392), avidine (AVD) and cyclophosphamide (CY). Individual rats in each group receive drug treatments consisting of 5 or 50 mg/kg ISO, 0.1 or 1.0 mg/kg Nosantine, 1 or 25 mg/kg AVD, or 75 mg/kg CY. Injections of ISO, Nosantine and AVD are given at three separate time intervals in relation to injection with bovine serum albumin (BSA). Isoprinosine and Nosantine are given twice at the same time as each BSA injection and a third time 3 days before termination. All rats are sacrificed by asphyxiation with CO₂ and assayed for immunocompetence 14 days after the initial BSA and KLH injections. Six separate immunoassays are performed to assess different immune responses in the same animal.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

References:

- [1]. Wiranowska-Stewart M, et al. Effects of isoprinosine and NPT 15392 on interleukin-2 (IL-2) production. Int J Immunopharmacol. 1986;8(1):63-9.
- [2]. Exon JH, et al. The selectivity of isoprinosine, NPT 15392, avridine and cyclophosphamide on multiple immuneresponses in rats. Int J Immunopharmacol. 1986;8(1):53-62.

Background

Nosantine racemate is the racemate of Nosantine. Nosantine is an inducer of IL-2 or enhancer of IL-2 induction by phytohemagglutinin (PHA).

The purine immunoenhancing drug Nosantine (NPT 15392) is evaluated as an inducer of IL-2 or enhancer of IL-2 induction by phytohemagglutinin (PHA). Nosantine is found to has significant enhancing activity on PHA induction of IL-2 by human lymphocytes over a wide range of concentrations[1].

Multiple concomitant immune responses are assessed in individual rats following treatment with the immunoenhancing drugs, Isoprinosine (5 or 50 mg/kg), Nosantine (0.1 or 1.0 mg/kg) and Avridine (1 or 25 mg/kg), or the immunosuppressant,

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Cyclophosphamide (75 mg/kg). Rats treated with Nosantine (NPT 15392) have significantly enhanced DTH reactions at the 0.1 mg/kg dose. It can be concluded that NPT 15392 act as general immunostimulants in the rat, with avridine having the greatest effect under these experimental conditions[2].

[1]. Wiranowska-Stewart M, et al. Effects of isoprinosine and NPT 15392 on interleukin-2 (IL-2) production. Int J Immunopharmacol. 1986;8(1):63-9. [2]. Exon JH, et al. The selectivity of isoprinosine, NPT 15392, avridine and cyclophosphamide on multiple immuneresponses in rats. Int J Immunopharmacol. 1986;8(1):53-62.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA