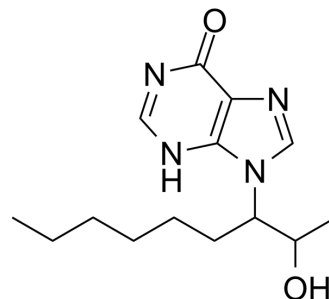


Nosantine racemate

Cat. No.:	HY-101687
CAS No.:	75166-67-5
Molecular Formula:	C ₁₄ H ₂₂ N ₄ O ₂
Molecular Weight:	278.35
Target:	Interleukin Related
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Nosantine racemate is the racemate of Nosantine. Nosantine is an inducer of IL-2 or enhancer of IL-2 induction by phytohemagglutinin (PHA).
IC₅₀ & Target	IL-2 ^[1]
In Vitro	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 have significant enhancing activity on PHA induction of IL-2 by human lymphocytes over a wide range of concentrations ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	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 Avidine (1 or 25 mg/kg), or the immunosuppressant, 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 avidine having the greatest effect under these experimental conditions ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration ^[2]	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 CO ₂ 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. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
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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.
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Caution: Product has not been fully validated for medical applications. For research use only.

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