Product Data Sheet

Product Name: Vinconate (Chanodesethylapovinc amine)
Cat. No.: GC31262

Chemical Properties

Cas. No.	70704-03-9		
SMILES	O=C(C1=CCC2N(CC)CCC3=C2N1C4=C3C=CC=C4)OC		
Formula	$C_{18}H_{20}N_2O_2$	M.Wt	296.36
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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:

344 male rats, 6 months (adult) and 24 months (aged) of age, are allowed food and water ad lib throughout the experiments. Rats are divided into four groups; (1) 6-month-old; (2) vehicle (distilled water) is administered intraperitoneally (i.p.) once a day for 4 weeks before decapitation; (3) Vinconate at a dose of 10 mg/kg is administered i.p. once a day for 4 weeks before decapitation; (4) Vinconate at a dose of 30 mg/kg is administered i.p. once a day for 4 weeks before decapitation. Rats in groups (2) to (4) are 24 months old. Each group contains 6 to 7 rats. In addition, there are no significant differences among the three aged animal groups in body weight after drug or vehicle treatment[2].

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

References:

[1]. Iino T, et al. Effect of vinconate, an indolonaphthyridine derivative, on dopamine and serotonin concentrations in dialysate from the striatum of freely moving rats: brain microdialysis studies. J Pharmacol Exp Ther. 1996 Aug;278(2):614-9.
[2]. Araki T, et al. Effects of vinconate on neurotransmitter receptor systems in aged rat brain. Environ Toxicol Pharmacol. 1996 Dec 20;2(4):343-9.

Background

Vinconate is an indolonaphthyridine derivative and can stimulate the muscariic acetylcholine receptor.

Treatment with Vinconate (50 to 200 mg/kg p.o.) significantly increases dopamine concentrations in dialysate. Daily treatment with Vinconate (25 mg/kg) for 7 days also significantly increases dopamine and serotonin concentrations in dialysate[1]. Chronic treatment with Vinconate at a 10 mg/kg significantly ameliorats the reduction in [3H]QNB binding in the nucleus accumbens and cerebellum. Furthermore, this Vinconate

treatment significantly enhances [3H]QNB binding in the frontal cortex and hippocampus compare with the vehicle-treated aged animals. Also, chronic treatment with Vinconate at the higher dose significantly elevates [3H]QNB binding in the hippocampal CA3 sector and dentate gyrus compare with the vehicle-treated aged animals. Chronic treatment with Vinconate at a dose of 10 mg/kg shows a significant reduction in [3H]HC binding only in the hippocampal CA1 sector compare with the vehicle-treated aged rats[2].

[1]. Iino T, et al. Effect of vinconate, an indolonaphthyridine derivative, on dopamine and serotonin concentrations in dialysate from the striatum of freely moving rats: brain microdialysis studies. J Pharmacol Exp Ther. 1996 Aug;278(2):614-9. [2]. Araki T, et al. Effects of vinconate on neurotransmitter receptor systems in aged rat brain. Environ Toxicol Pharmacol. 1996 Dec 20;2(4):343-9.