Product Datasheet

NAD 299 hydrochloride

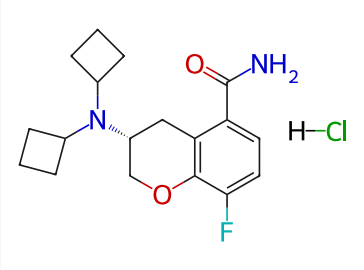
Catalog No. **BP-06922A** · CAS **184674-99-5** · Form **salt · hydrochloride** · Physical state **solid** · Color **White to off-white** · Version **1.0** · Revision **2026-11-13**

FOR RESEARCH USE ONLY. NOT FOR HUMAN OR VETERINARY USE.

Target	Research area
5-HT Receptor	**Neurological Disease**

Molecular formula	**$C_{18}H_{24}ClFN_2O_2$**
Molecular weight	**354.8470**

STRUCTURE



DESCRIPTION

Robalzotan hydrochloride (NAD-299 hydrochloride) is a potent and selective 5-Hydroxytryptamine 1A (5-HT1A) inhibitor. Robalzotan hydrochloride increases the firing rate of 5-HT cells. Robalzotan hydrochloride induces 5-HT1A receptor occupancy. Robalzotan hydrochloride has the potential for the research of a cholinergic deficit in the central -nervous system.

BIOLOGICAL ACTIVITY

In Vivo

Robalzotan hydrochloride (1-100 μg/kg; i.v.) significantly increases the activity of such neurons at 5 μg/kg in rats, and reverses the acute inhibitory effect of citalopram (HY-121203) (300 μg/kg i.v.) or paroxetine (HY-122272) (100 μg/kg, i.v.) on the activity of 5-HT neurons in the dorsal raphe nucleus in rats[1].

Robalzotan hydrochloride (5, 50 μg/kg; i.v.) increases the firing rate of the 5-HT cells[1].

Robalzotan hydrochloride (2-100 μg/kg; i.v.) occupies 5-HT1A receptors in a dose-dependent in monkeys[2].

Robalzotan hydrochloride (0.3; 1 and 3 μmol/kg s.c) causes a dose-dependent increase of extracellular ACh levels in the rat FC[3].

SOLUBILITY

soluble in DMSO

REFERENCES

[1]. Arborelius L, et al. The 5-HT(1A) receptor antagonist robalzotan completely reverses citalopram-induced inhibition of serotonergic cell firing. Eur J Pharmacol. 1999 Oct 8;382(2):133-8.

[2]. Farde L, et al. PET-Determination of robalzotan (NAD-299) induced 5-HT(1A) receptor occupancy in the monkey brain. Neuropsychopharmacology. 2000 Apr;22(4):422-9.

[3]. Hu, Xiao Jing, et al. Modulation of acetylcholine release by serotonergic 5-HT1A and 5-HT1B receptors : a microdialysis study in the awake rat. 2007.
