
Product Data Sheet

Product Name: Alniditan dihydrochloride

Cat. No.: GC62417

Chemical Properties

Cas. No. 155428-00-5

Formula $C_{17}H_{28}Cl_2N_4O$

M.Wt 375.34

Solubility DMSO : 62.5 mg/mL (166.52 mM; Need ultrasonic) 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

Background

Alniditan (Alnitidan) dihydrochloride is a potent 5-HT_{1B} and 5-HT_{1D} receptors agonist, with IC₅₀s of 1.7 nM and 1.3 nM for h5-HT_{1B} and h5-HT_{1D} receptors in HEK 293 cells, respectively. Alniditan dihydrochloride has migraine-preventive effects[1][2].

In vitro, Alniditan exhibits little vasoconstrictive effects on the rat basilar artery, although at a very high concentration 1 mM, Alniditan causes intensive constriction, most likely through a mechanism independent from 5-HT receptor activation[1].

The intraperitoneal administration of Alniditan ED₅₀=9 µg/kg dose dependly reduces [125I]-BSA extravasation in the rat meninges when done 30 min before stimulation. Alniditan dose dependently attenuated the neurogenic inflammation in vivo model of neurogenic inflammation[1].

[1]. Limmroth V, et al. Effects of alniditan on neurogenic oedema in the rat dura mater and on contraction of rat basilar artery. Eur J Pharmacol. 1999 Oct 8;382(2):103-9.

[2]. Lesage AS, et al. Agonistic properties of alniditan, sumatriptan and dihydroergotamine on human 5-HT_{1B} and 5-HT_{1D} receptors expressed in various mammalian cell lines. Br J Pharmacol. 1998 Apr;123(8):1655-65.

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

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