Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

GTS-21 (dihydrochloride)

Catalog No: tcsc5486

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
156223-05-1

Formula:
$C_{19}H_{22}Cl_2N_2O_2$

Pathway:
Neuronal Signaling;Membrane Transporter/Ion Channel

Target:
nAChR;nAChR

Purity / Grade:
>98%

Solubility:
DMSO : 16.5 mg/mL (43.27 mM; Need ultrasonic and warming)

Alternative Names:
DMXB-A;DMBX-anabaseine

Observed Molecular Weight:
381.3

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Product Description

GTS-21 dihydrochloride is a selective α7 nicotinic acetylcholine receptor agonist, has recently been established as a promising treatment for inflammation.

Target: nAChR

in vitro: GTS-21 is one of the most potent α7nAChR agonists, has been reported to attenuate pro-inflammatory cytokine production, improve outcomes in sepsis models, pancreatitis, and ischemia-reperfusion injury, and inhibit the production of endotoxin-induced TNF in lung tissue. In addition, recent studies have demonstrated that GTS-21 inhibits the activities of endothelial cells and monocyte macrophages, as well as the secretion of pro-inflammatory cytokines in peripheral blood samples, by regulating the JAK2-STAT3 pathway. [1]

in vivo: In septic animals, GTS-21 significantly ameliorated GI motility, lowered systemic and colonic levels of IL-6, decreased colonic permeability, and decreased the number of positive cultures obtained from blood and mesenteric lymph nodes. Splenectomy prevented animals from developing sepsis-induced ileus. Chrna7 mice displayed a more severe septic phenotype, whereas GTS-21 remarkably was also beneficial in these animals. [2]