

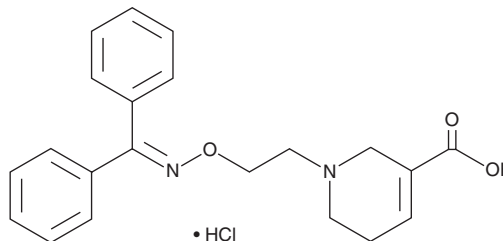
PRODUCT INFORMATION



NNC-711 (hydrochloride)

Item No. 29687

CAS Registry No.: 145645-62-1
Formal Name: 1-[2-[[[(diphenylmethylene)amino]oxy]ethyl]-1,2,5,6-tetrahydro-3-pyridinecarboxylic acid, monohydrochloride
Synonyms: NNC 05-711, NO-711
MF: C₂₁H₂₂N₂O₃ • HCl
FW: 386.9
Purity: ≥98%
UV/Vis.: λ_{max}: 258 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

NNC-711 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the NNC-711 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. NNC-711 (hydrochloride) is soluble in organic solvents such as DMSO. It is also soluble in water. The solubility of NNC-711 (hydrochloride) in water is approximately 10 mM. We do not recommend storing the aqueous solution for more than one day.

Description

NNC-711 is an inhibitor of GABA transporter 1 (GAT-1; IC₅₀ = 0.04 μM for the human transporter).¹ It is selective for GAT-1 over human GAT-3 and BGT-3 (IC₅₀s = 1,700 and 622 μM, respectively), rat GAT-2 (IC₅₀ = 171 μM), and a panel of 21 receptors and ion channels (IC₅₀s = >50 μM for all) in radioligand binding assays.^{1,2} NNC-711 inhibits GABA uptake in rat synaptosome preparations, neurons, and glia (IC₅₀s = 47, 1,238, and 636 nM, respectively).² *In vivo*, NNC-711 inhibits clonic seizures induced by pentylenetetrazole (PTZ; Item No. 18682) or DMCM in mice (ED₅₀s = 1.2 and 3 mg/kg, respectively), as well as audiogenic tonic seizures in mice (ED₅₀ = 0.23 mg/kg) and PTZ-induced tonic seizures in rats (ED₅₀ = 1.7 mg/kg). Intrathecal administration of NNC-711 (100 or 200 μg/animal) decreases mechanical allodynia and thermal hyperalgesia in a rat model of neuropathic pain induced by chronic constriction injury (CCI).³

References

1. Borden, L.A., Murali Dhar, T.G., Smith, K.E., *et al.* Tiagabine, SK&F 89976-A, CI-966, and NNC-711 are selective for the cloned GABA transporter GAT-1. *Eur. J. Pharmacol.* **269**(2), 219-224 (1994).
2. Suzdak, P.D., Frederiksen, K., Andersen, K.A., *et al.* NNC-711, a novel potent and selective γ-aminobutyric acid uptake inhibitor: Pharmacological characterization. *Eur. J. Pharmacol.* **224**(2-3), 189-198 (1992).
3. Li, Y., Li, Y., Gu, P., *et al.* Analgesic effect of intrathecally γ-aminobutyric acid transporter-1 inhibitor NO-711 administrating on neuropathic pain in rats. *Neurosci. Lett.* **494**(1), 6-9 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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