

PRODUCT INFORMATION



GNTI (hydrochloride)

Item No. 31597

CAS Registry No.: 351183-88-5

Formal Name: [(4bS,8R,8aS,14bR)-7-(cyclopropylmethyl)-5,6,7,8,8a,9,14,14b-octahydro-1,8a-dihydroxy-4,8-methanobenzofuro[2,3-a]pyrido[4,3-b]carbazol-11-yl]-guanidine, dihydrochloride

Synonym: 5'-Guanidinonaltrindole

MF: $C_{27}H_{29}N_5O_3 \cdot 2HCl$

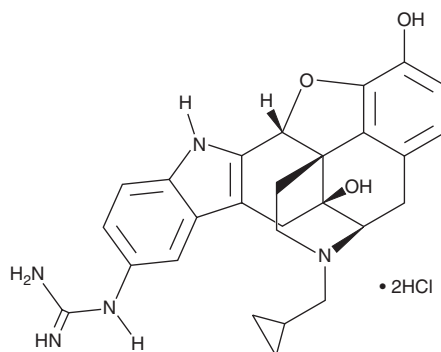
FW: 544.5

Purity: $\geq 98\%$

Supplied as: A solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



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

Laboratory Procedures

GNTI (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the GNTI (hydrochloride) in the solvent of choice, which should be purged with an inert gas. GNTI (hydrochloride) is soluble in the organic solvent DMSO. It is also soluble in water. The solubility of GNTI (hydrochloride) in DMSO and water is approximately 48 and 40 mg/ml, respectively. We do not recommend storing the aqueous solution for more than one day.

Description

GNTI is a κ -opioid receptor antagonist ($K_i = 0.18$ nM).¹ It is selective for κ -opioid receptors over μ - and δ -opioid receptors in radioligand binding assays (K_i s = 36.9 and 70 nM, respectively). GNTI inhibits agonist-induced [^{35}S]GTP γ S binding in CHO cells expressing human κ -opioid receptors ($pA_2 = 10.4$). *In vivo*, GNTI (0.3 mg/kg) induces scratching behavior in mice.²

References

1. Jones, R.M. and Portoghesi, P.S. 5'-Guanidinonaltrindole, a highly selective and potent κ -opioid receptor antagonist. *Eur. J. Pharmacol.* **396**(1), 49-52 (2000).
2. Lee, Y.-C., Lin, C.-H., Hung, S.-Y., *et al.* Manual acupuncture relieves bile acid-induced itch in mice: The role of microglia and TNF- α . *Int. J. Med. Sci.* **15**(9), 953-960 (2018).

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.

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