

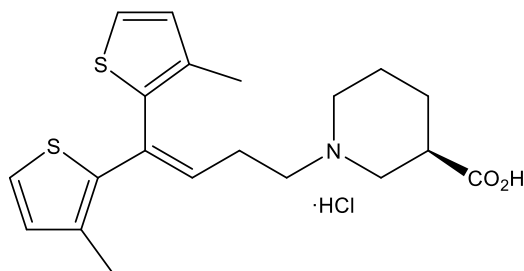
Catalog # 10-4384

Tiagabine hydrochloride

CAS# 145821-59-6

(3R)-1-[4,4-Bis(3-methylthiophen-2-yl)but-3-enyl]piperidine-3-carboxylic acid hydrochloride; NO-328

Lot # FBS2078



Tiagabine is a clinically useful anticonvulsant.¹ It is also used to treat anxiety/panic disorder² and neuropathic pain³. Tiagabine inhibits GABA-reuptake (IC₅₀ [³H]GABA uptake = 67 nM) via inhibiting GABA transporter 1(GAT1) blocking both neuronal and glial GABA re-uptake.^{4,5}

- 1) Schacter (1999) *A Review of the Antiepileptic Drug Tiagabine*, Clin. Neuropharmacol. **22** 312
- 2) Schwartz and Nihalani (2006) *Tiagabine in anxiety disorders*, Expert Opin. Pharmacother. **7** 1977
- 3) Novak *et al.* (2001) *Treatment of Painful Sensory Neuropathy With Tiagabine: A Pilot Study*, Clin. Auton. Res. **11** 357
- 4) Braestrup *et al.* (1990) *(R)-N-[4,4-bis(3-methyl-2-thienyl)but-3-en-1-yl]nipecotic Acid Binds With High Affinity to the Brain Gamma-Aminobutyric Acid Uptake Carrier*, J.Neurochem. **54** 639
- 5) Nielsen *et al.* (1991) *Characterization of Tiagabine (NO-328), a New Potent and Selective GABA Uptake Inhibitor*, Eur. J. Pharmacol. **196** 257

PHYSICAL DATA

Molecular Weight:	412.00
Molecular Formula:	C ₂₀ H ₂₅ NO ₂ S ₂ ·HCl
Purity:	>98% (HPLC)
Solubility:	DMSO (>25 mg/mL); ethanol (>25 mg/mL), water (>30 mg/mL)
Physical Description:	Off-white/beige solid
Storage and Stability:	Store as supplied at -20°C for up to one year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months

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