



(-)-QUINPROLIDE HYDROCHLORIDE

Product Number **Q-102**

Storage Temperature -20°C

Cas #: 85798-08-9

Synonyms: LY-171,555; *trans*-(-)-4aR-4,4a,5,6,7,8,8a,9-Octahydro-5-propyl-1H-pyrazolo[3,4-g]quinoline hydrochloride

Product Description

Mol. Formula: C₁₃H₂₁N₃·HCl

MW: 255.79 (anhydrous)

White powder

[α]_D²⁵ = -124.5° (c=0.4, H₂O)

(-)-Quinpirole is a D₂-like dopamine receptor agonist with some selectivity for D₃ sites. It is the active enantiomer of (±)-Quinpirole dihydrochloride (Q-111).

Dopamine receptors were initially divided into two classes (D₁ and D₂) based on differences in receptor pharmacology and biochemical mechanisms of signal transduction. With the application of molecular biology techniques, additional dopamine receptors were identified based on their homology to D₁ and D₂. Two families of DA receptors are currently recognized. The D₁-like family comprises D₁ and D₅ receptors. The D₂-like family includes D₂, D₃, and D₄.

Preparation Instructions

Soluble in 0.1 N HCl (23 mg/ml) or water (7.3 mg/ml).

Storage/Stability

Store tightly sealed at -20°C.

Product Information

References

Rosenzweig-Lipson, L., and Barrett, J.E., K-Channel blockers attenuate the presynaptic effects of the D₂/D₃ agonist quinpirole in monkeys. *Pharmacol. Biochem. Behav.* **51**, 843-848 (1995).

Sanger, D.J.D., et al., Evidence for a role for dopamine D₃ receptors in the effects of dopamine agonists on operant behaviour in rats. *Behav Pharmacol* **7**, 477-482 (1996).

Munro, L.J., and Kokkinidis, L., Infusion of quinpirole and muscimol into the ventral tegmental area inhibits fear-potentiated startle: implications for the role of dopamine in fear expression. *Brain Res.*, **746**, 231-238 (1997).

Kebabian, et al., Compounds selective for dopamine receptor subtypes. *Drug Discovery Today*, **2**, 333-340 (1997).

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Zaworski, P.G., et al., Efficient functional coupling of the human D₃ dopamine receptor to G(o) subtype of G proteins in SH-SY5Y cells. *Br. J. Pharmacol.*, **128**, 1181-1188 (1999).

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