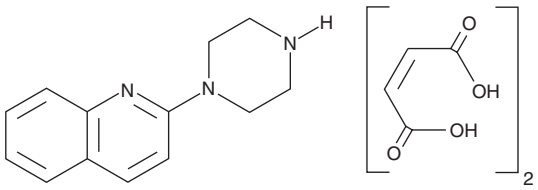
PRODUCT INFORMATION

Quipazine (maleate)

Item No. 42262

CAS Registry No.: 150323-78-7
Formal Name: 2-(1-piperazinyl)-quinoline, (2Z)-2-butenedioate (1:2)
MF: $C_{13}H_{15}N_3 \bullet 2C_4H_4O_4$
FW: 445.4
Purity: ≥98%
Supplied as: A 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

Quipazine (maleate) is supplied as a solid. A stock solution may be made by dissolving the quipazine (maleate) in the solvent of choice, which should be purged with an inert gas. Quipazine (maleate) is sparingly soluble (1-10 mg/ml) in DMSO.

Quipazine (maleate) is slightly soluble (0.1-1 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Quipazine is an agonist of the serotonin (5-HT) receptor subtypes 5-HT_{2A}, 5-HT_{2B}, and 5-HT_{2C}.[1] It induces calcium accumulation in CHO-K1 cells expressing 5-HT_{2A}, 5-HT_{2B}, or 5-HT_{2C} (EC_{50}s = 309.03, 177.83, and 338.84 nM, respectively, for the human receptors). Quipazine also binds to the 5-HT_3 receptor (K_i = 2.1 nM).[2] It decreases food intake in rats when administered at doses of 2.5, 5, or 10 mg/kg.[3] Quipazine (0.3 mg/kg per day), in combination with 8-hydroxy DPAT (Item No. 22608), electrode stimulation of dorsal and lumbar spine regions, and locomotor training, restores spinal circuitry function, improves gait regularity, and increases interlimb coordination and limb weight-bearing in a rat model of hindlimb paralysis induced by spinal cord transection.[4]

References

1. Porter, R.H.P., Benwell, K.R., Lamb, H., *et al.* Functional characterization of agonists at recombinant human 5-HT_{2A}, 5-HT_{2B} and 5-HT_{2C} receptors in CHO-K1 cells. *Br. J. Pharmacol.* **128(1)**, 13-20 (1999).
2. Schiavi, G.B., Brunet, S., Rizzi, C.A., *et al.* Identification of serotonin 5-HT_4 recognition sites in the porcine caudate nucleus by radioligand binding. *Neuropharmacology* **33(3-4)**, 543-549 (1994).
3. Samanin, R., Bendotti, C., Miranda, F., *et al.* Decrease of food intake by quipazine in the rat: Relation to serotoninergic receptor stimulation. *J. Pharm. Pharmacol.* **29(1)**, 53-54 (1977).
4. Courtine, G., Gerasimenko, Y., van den Brand, R., *et al.* Transformation of nonfunctional spinal circuits into functional states after the loss of brain input. *Nat. Neurosci.* **12(10)**, 1333-1342 (2009).

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