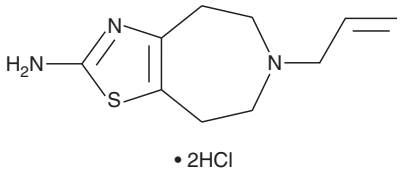
PRODUCT INFORMATION

B-HT 920 (hydrochloride)

Item No. 14177

CAS Registry No.:	36085-73-1
Formal Name:	5,6,7,8-tetrahydro-6-(2-propen-1-yl)-4H-thiazolo[4,5-d]azepin-2-amine, dihydrochloride
MF:	$C_{10}H_{15}N_3S \bullet 2HCl$
FW:	282.2
Purity:	≥95%
UV/Vis.:	λ_{max}: 225, 263 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

B-HT 920 (hydrochloride) is supplied as a crystalline solid. Aqueous solutions of B-HT 920 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of B-HT 920 (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

B-HT 920 is a potent agonist of dopamine 2 (D_2) receptors (K_i = 5.8 nM) that shows selectivity for D_2 over D_3 and D_4 receptors.[1-3] It has neuroprotective and regenerative effects in animal models of Parkinson's disease.[4] B-HT 920 is also an agonist of α_2-adrenergic receptors and an antagonist of serotonin-3 (5-HT_3; K_i = 0.35 µM) receptors.[5,6]

References

1. Maina, F.K., and Mathews, T.A. A functional fast scan cyclic voltammetry assay to characterize dopamine D_2 and D_3 autoreceptors in the mouse striatum. *ACS Chem Neurosci.* **1(6)**, 450-462 (2010).
2. Mewshaw, R.E., Kavanagh, J.J., Stack, G., *et al.* New generation dopaminergic agents. 1. Discovery of a novel scaffold which embraces the D_2 agonist pharmacophore. Structure-activity relationships of a series of 2-(aminomethyl)chromans. *J. Med. Chem.* **40(26)**, 4235-4256 (1997).
3. Robertson, G.S., Tham, C.S., Wilson, C., *et al.* In vivo comparisons of the effects of quinpirole and the putative presynaptic dopaminergic agonists B-HT 920 and SND 919 on striatal dopamine and acetylcholine release. *J. Pharmacol. Exp. Ther.* **264(3)**, 1344-1351 (1993).
4. Kitamura, Y. Dopaminergic neuroprotection and reconstruction of neural network tiara. *Yakugaku Zasshi* **130(10)**, 1263-1272 (2010).
5. Nishio, H., Kohno, Y., Fujii, A., *et al.* 5-HT_3 receptor blocking properties of the antiparkinsonian agent, talipexole. *Gen. Pharmcol.* **27(5)**, 778-785 (1996).
6. Rocco, D., and Taira, C.A. Adrenoceptor involvement in the cardiovascular responses to B-HT 920 in sinoaortic denervated rats. *Gen. Pharmcol.* **32(1)**, 29-34 (1999).

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