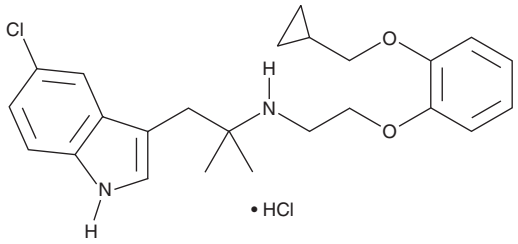
PRODUCT INFORMATION

RS 17053 (hydrochloride)

Item No. 33548

CAS Registry No.:	169505-93-5
Formal Name:	5-chloro-N-[2-[2-(cyclopropylmethoxy)phenoxy]ethyl]-α,α-dimethyl-1H-indole-3-ethanamine, monohydrochloride
MF:	$C_{24}H_{29}ClN_2O_2$ • HCl
FW:	449.4
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

RS 17053 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the RS 17053 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. RS 17053 (hydrochloride) is soluble in ethanol and DMSO. The solubility of RS 17053 (hydrochloride) in these solvents is approximately 10 and 50 mM, respectively.

Description

RS 17053 is an α_{1A}-adrenergic receptor (α_{1A}-AR) antagonist.[1] It selectively binds to the α_{1A}-AR (K_i = 2.5 nM) over α_{1B}- and α_{1D}-ARs (K_is = 50 and 79 nM, respectively). RS 17053 inhibits norepinephrine-induced contractions in isolated rat kidney and mesenteric arteries (pA_2s = 9.8 and 9.9, respectively), tissues that endogenously express high levels of α_{1A}-AR, and, to a lesser extent, in isolated rat aortic rings, which highly express α_{1D}-ARs, and human lower urinary tract tissue (pA_2s = 7.7 and 7.3, respectively).[2] It also inhibits phenylephrine-induced increases in mean arterial pressure (MAP) in normotensive and spontaneously hypertensive rats (ED_{50}s = 528 and 533 µg/kg, respectively).[3]

References

1. Kenny, B.A., Miller, A.M., Williamson, I.J.R., *et al.* Evaluation of the pharmacological selectivity profile of α_1 adrenoceptor antagonists at prostatic α_1 adrenoceptors: Binding, functional and *in vivo* studies. *Br. J. Pharmacol.* **118(4)**, 871-878 (1996).
2. Ford, A.P.D.W., Arrendondo, N.F., Blue, D.R., Jr., *et al.* RS-17053 (*N*-[2-(2-cyclopropylmethoxyphenoxy) ethyl]-5-chloro-α, α-dimethyl-1*H*-indole-3-ethanamine hydrochloride), a selective α_{1A}-adrenoceptor antagonist, displays low affinity for functional α_1-adrenoceptors in human prostate: Implications for adrenoceptor classification. *Mol. Pharmacol.* **49(2)**, 209-215 (1996).
3. Qi, X., Weizhong, Z., Zhizhen, L., *et al.* α_{1A}-adrenergic receptor mediated pressor response to phenylephrine in anesthetized rat. *Sci. China C. Life Sci.* **47(1)**, 59-65 (2004).

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