

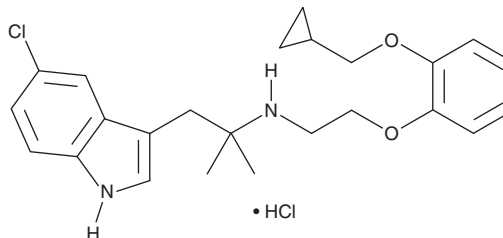
# PRODUCT INFORMATION



## RS 17053 (hydrochloride)

Item No. 33548

**CAS Registry No.:** 169505-93-5  
**Formal Name:** 5-chloro-N-[2-[2-(cyclopropylmethoxy)phenoxy]ethyl]- $\alpha,\alpha$ -dimethyl-1H-indole-3-ethanamine, monohydrochloride  
**MF:** C<sub>24</sub>H<sub>29</sub>ClN<sub>2</sub>O<sub>2</sub> • 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  $\alpha_{1A}$ -adrenergic receptor ( $\alpha_{1A}$ -AR) antagonist.<sup>1</sup> It selectively binds to the  $\alpha_{1A}$ -AR ( $K_i$  = 2.5 nM) over  $\alpha_{1B}$ - and  $\alpha_{1D}$ -ARs ( $K_i$ s = 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  $\alpha_{1A}$ -AR, and, to a lesser extent, in isolated rat aortic rings, which highly express  $\alpha_{1D}$ -ARs, and human lower urinary tract tissue ( $pA_{2s}$  = 7.7 and 7.3, respectively).<sup>2</sup> It also inhibits phenylephrine-induced increases in mean arterial pressure (MAP) in normotensive and spontaneously hypertensive rats ( $ED_{50}$ s = 528 and 533  $\mu$ g/kg, respectively).<sup>3</sup>

### References

1. Kenny, B.A., Miller, A.M., Williamson, I.J.R., *et al.* Evaluation of the pharmacological selectivity profile of  $\alpha_1$  adrenoceptor antagonists at prostatic  $\alpha_1$  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- $\alpha$ ,  $\alpha$ -dimethyl-1H-indole-3-ethanamine hydrochloride), a selective  $\alpha_{1A}$ -adrenoceptor antagonist, displays low affinity for functional  $\alpha_1$ -adrenoceptors in human prostate: Implications for adrenoceptor classification. *Mol. Pharmacol.* **49**(2), 209-215 (1996).
3. Qi, X., Weizhong, Z., Zhizhen, L., *et al.*  $\alpha_{1A}$ -adrenergic receptor mediated pressor response to phenylephrine in anesthetized rat. *Sci. China C. Life Sci.* **47**(1), 59-65 (2004).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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