## Cinanserin (hydrochloride)

Item No. 30729

CAS Registry No.: 54-84-2
$\begin{array}{ll}\text { CAS Registry No.: } & 54-84-2 \\ \text { Formal Name: } & \mathrm{N} \text {-[2-[[3-(dimethylamino)propyl]thio]phenyl]- } \\ & 3 \text {-phenyl-2-propenamide, monohydrochloride } \\ \text { Synonym: } & \text { SQ } 10,643 \\ \text { MF: } & \mathrm{C}_{20} \mathrm{H}_{24} \mathrm{~N}_{2} \mathrm{OS} \bullet \mathrm{HCl} \\ \text { FW: } & 376.9 \\ \text { Purity: } & \geq 98 \% \\ \text { Supplied as: } & \text { A solid } \\ \text { Storage: } & -20^{\circ} \mathrm{C} \\ \text { Stability: } & \geq 4 \text { years }\end{array}$
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

Cinanserin (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the cinanserin (hydrochloride) in water. We do not recommend storing the aqueous solution for more than one day.

## Description

Cinanserin is a serotonin ( $5-\mathrm{HT}$ ) receptor antagonist. ${ }^{1,2}$ It inhibits $5-\mathrm{HT}$-induced effects on isolated rat uterus but not guinea pig ileum. ${ }^{1}$ Cinanserin inhibits 5-HT-induced gross excitation, gastric mucosal erosion, and anaphylactoid edema in mice and rats. Cinanserin ( 12 and $36 \mathrm{mg} / \mathrm{kg}$, i.p.) impairs acquisition of a running response in rats trained for food reward. ${ }^{2}$ It inhibits severe acute respiratory syndrome coronavirus (SARS-CoV) 3C-like proteinase ( $3 \mathrm{CL}^{\text {pro }}$; $\mathrm{IC}_{50}=5 \mu \mathrm{M}$ ) and reduces SARS-CoV viral RNA levels in infected BHK-Rep-1 cells $\left(I_{50} s=19-34 \mu \mathrm{M}\right) .{ }^{3}$ It also inhibits viral replication of murine hepatitis virus (MHV) in CCL-9.1 murine liver epithelial cells ( $\left.\mathrm{IC}_{50}=31.25 \mu \mathrm{~g} / \mathrm{ml}\right) .{ }^{4}$

## References

1. Rubin, B., Piala, J.J., Burke, J.C., et al. A new, potent, and specific serotonin inhibitor (SQ 10,643 ) 2'-(3-dimethylaminopropylthio) cinnamanilide hydrochloride: Antiserotonin activity on uterus and on gastrointestinal, vascular, and respiratory systems of animals. Arch. Int. Pharmacodyn. Ther. 152, 132-143 (1964).
2. Rosen, A.J. and Cohen, M.E. The effects of cinanserin, a potent serotonin antagonist, on the acquisition of a running response in the rat. Neuropharmacology 12(6), 501-508 (1973).
3. Chen, L., Gui, C., Luo, X., et al. Cinanserin is an inhibitor of the 3C-like proteinase of severe acute respiratory syndrome coronavirus and strongly reduces virus replication in vitro. J. Virol. 79(11), 7095-7103 (2005).
4. Chiow, K.H., Phoon, M.C., Putti, T., et al. Evaluation of antiviral activities of Houttuynia cordata Thunb. extract, quercetin, quercetrin and cinanserin on murine coronavirus and dengue virus infection. Asian Pac. J. Trop. Med. 9(1), 1-7 (2016).
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[^0]:    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.

