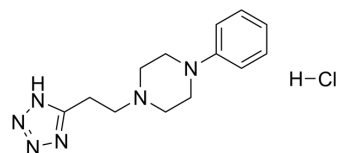


## Zolertine hydrochloride

|                    |   |
|--------------------|---|
| Cat. No.:          | HY-123368   |
| CAS No.:           | 7241-94-3   |
| Molecular Formula: | C <sub>13</sub> H <sub>19</sub> ClN <sub>6</sub>  |
| Molecular Weight:  | 294.78  |
| Target:            | Adrenergic Receptor   |
| Pathway:           | GPCR/G Protein; Neuronal Signaling  |
| Storage:           | Please store the product under the recommended conditions in the Certificate of Analysis. |



### BIOLOGICAL ACTIVITY

|                                     |  |  |
|-------------------------------------|--|--|
| <b>Description</b>                  | Zolertine hydrochloride is an $\alpha$ -adrenoceptor antagonist with a pK <sub>i</sub> of 6.81 in rat liver ( $\alpha_{1B}$ -adrenoceptors) and 6.35 in rabbit liver ( $\alpha_{1A}$ -adrenoceptors) membranes <sup>[1]</sup> .  |  |
| <b>IC<sub>50</sub> &amp; Target</b> | $\alpha_{1A}$ -adrenergic receptor<br>6.35 (pK <sub>i</sub> , in rabbit liver membrane)  | $\alpha_{1B}$ -adrenergic receptor<br>6.81 (pK <sub>i</sub> , in rat liver membrane) |
| <b>In Vitro</b>                     | <p>The contractile responses induced by noradrenaline are competitively antagonized by Zolertine hydrochloride in rat carotid and aorta arteries, yielding pA<sub>2</sub> values of WKY, 7.48±0.18; SHR, 7.43±0.13 and WKY, 7.57±0.24; SHR, 7.40±0.08, respectively. Zolertine hydrochloride is a non-competitive antagonist in some blood vessels as Schild plot slopes are lower than unity. The pK<sub>b</sub> estimates for Zolertine hydrochloride are WKY, 6.98±0.16; SHR, 6.81±0.18 in the mesenteric artery, WKY, 5.73±0.11; SHR, 5.87±0.25 in the caudal artery and 6.65±0.09 in rabbit aorta<sup>[1]</sup>.</p> <p>Zolertine hydrochloride shows higher affinity for <math>\alpha_{1D}</math>-adrenoceptors compared to <math>\alpha_{1A}</math>-adrenoceptors, while it had an intermediate affinity for <math>\alpha_{1B}</math>-adrenoceptors<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> |  |

### REFERENCES

[1]. Ibarra M, et al. The alpha-adrenoceptor antagonist, zolertine, inhibits alpha1D- and alpha1A-adrenoceptor-mediated vasoconstriction in vitro. J Auton Pharmacol. 2000 Jun;20(3):139-45.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA