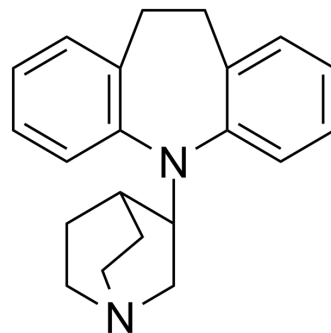


Quinupramine

| | |
|--------------------|---|
| Cat. No.: | HY-106578 |
| CAS No.: | 31721-17-2 |
| Molecular Formula: | C ₂₁ H ₂₄ N ₂ |
| Molecular Weight: | 304.43 |
| Target: | Others |
| Pathway: | Others |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | | | | | | | | | |
|-----------------|---|---------------|---------------------------------------|---------|----------|-----------------|-----------------------------|---------|---|
| Description | Quinupramine is an orally active antidepressant. Quinupramine can penetrate into the CNS and affect some of the processes of neurotransmission. The antidepressant activity of quinupramine is associated with the central serotonin system, but not with the β -adrenergic system[1][2]. | | | | | | | | |
| In Vivo | <p>Quinupramine (10 mg/kg, PO, twice daily for 10 days) causes a down-regulation of serotonin S₂ receptors in the frontal cortex of the rat^[2].</p> <p>Quinupramine-EVA matrix containing a permeation enhancer can be a good transdermal delivery system for providing sustained plasma concentrations^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td><td>Sprague-Dawley rats (Male, 220-270 g)</td></tr> <tr> <td>Dosage:</td><td>10 mg/kg</td></tr> <tr> <td>Administration:</td><td>PO, twice daily for 10 days</td></tr> <tr> <td>Result:</td><td>Caused a down-regulation of serotonin S₂ receptors in the frontal cortex of the rat, did not alter the binding populations of α-adrenergic, muscarinic cholinergic and α_2-adrenergic receptors in the rat brain.</td></tr> </table> | Animal Model: | Sprague-Dawley rats (Male, 220-270 g) | Dosage: | 10 mg/kg | Administration: | PO, twice daily for 10 days | Result: | Caused a down-regulation of serotonin S ₂ receptors in the frontal cortex of the rat, did not alter the binding populations of α -adrenergic, muscarinic cholinergic and α_2 -adrenergic receptors in the rat brain. |
| Animal Model: | Sprague-Dawley rats (Male, 220-270 g) | | | | | | | | |
| Dosage: | 10 mg/kg | | | | | | | | |
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| Result: | Caused a down-regulation of serotonin S ₂ receptors in the frontal cortex of the rat, did not alter the binding populations of α -adrenergic, muscarinic cholinergic and α_2 -adrenergic receptors in the rat brain. | | | | | | | | |

REFERENCES

- [1]. Sakamoto H, et al. Effects of quinupramine on the central monoamine uptake systems and involvement of pharmacokinetics in its pharmacological activities. Jpn J Pharmacol. 1987;45(2):169-175.
- [2]. Sakamoto H, et al. Down-regulation of central serotonin S₂ receptors after repeated treatment with quinupramine in rats. Jpn J Pharmacol. 1987;43(4):369-377.
- [3]. Shin SC, et al. Development and biopharmaceutical evaluation of quinupramine-EVA matrix containing penetration enhancer for the enhanced transdermal absorption in rats. Pharm Dev Technol. 2007;12(5):429-436.

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

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