Midaglizole hydrochloride

Cat. No.: HY-U00165
CAS No.: 79689-25-1
Molecular Formula: C₁₆H₁₉Cl₂N₃
Molecular Weight: 324.25
Target: Adrenergic Receptor
Pathway: GPCR/G Protein; Neuronal Signaling
Storage: Please store the product under the recommended conditions in the COA.

**BIOLOGICAL ACTIVITY**

<table>
<thead>
<tr>
<th>Description</th>
<th>pKi : 6.28 (α2-adrenoceptor)¹¹</th>
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</thead>
<tbody>
<tr>
<td><strong>IC₅₀ &amp; Target</strong></td>
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<tr>
<td><strong>In Vitro</strong></td>
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<tr>
<td>Midaglizole (DG-5128) at concentrations up to 10 μM inhibits [³H]clonidine binding more effectively than it did [³H]prazosin binding in rat cerebral cortex membranes. The mode of inhibition is homogeneous and consistent with the law of simple mass action¹. The EC₅₀ values for stimulation of insulin release from rat islets and the MIN6 β-cell line induced by Midaglizole are 200 nM and 24 μM, respectively. The IC₅₀ values for Kₐ₅p current inhibition induced by Midaglizole are 3.8 μM and 4.4 μM for Kir6.2 and Kir6.2/SUR1, respectively².</td>
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<tr>
<td><strong>In Vivo</strong></td>
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<td>Midaglizole (3 and 30 mg/kg, i.v.) increases blood pressure in pithed rats³.</td>
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</tbody>
</table>

**PROTOCOL**

Animal Administration³

Male Wistar rats (290-450 g) are anesthetized with pentobarbital sodium (35 mg/kg, i.p.) and artificially ventilated with room air. Diastolic blood pressure before the administration of the Midaglizole (Midaglizole) is about 35 mmHg. Midaglizole at doses of 3 and 30 mg/kg produces an increase in blood pressure by 27 and 64 mmHg, respectively, at approximately 1 min after the administration.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**REFERENCES**