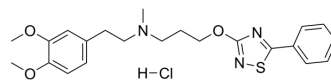


## KC 12291 hydrochloride

Cat. No.:	HY-108502
CAS No.:	181936-98-1
Molecular Formula:	C <sub>22</sub> H <sub>28</sub> ClN <sub>3</sub> O <sub>3</sub> S
Molecular Weight:	449.99
Target:	Sodium Channel
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	KC 12291 hydrochloride is an orally active blocker of voltage-gated sodium channel (VGSC). KC 12291 hydrochloride reduces the amplitude of sustained Na <sup>+</sup> current to exert antiischemic activity. KC 12291 hydrochloride has significant cardioprotective effect in vitro and in vivo <sup>[1]</sup> .								
<b>In Vitro</b>	KC 12291 hydrochloride (1 μM) reduces the peak of Na <sup>+</sup> current approximately 60 % in rat ventricular cardiomyocytes <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
<b>In Vivo</b>	<p>KC 12291 hydrochloride (0.63 mg/kg for p.o; once) exerts significant antiischemic activity in anesthetized rabbit model<sup>[1]</sup>. KC 12291 hydrochloride (60 mg/kg for p.o) has plasma C<sub>max</sub> values of 1.3 and 1.4 μg/mL for female and male rats, respectively, and the value of plasma T<sub>max</sub> is close to 2 h<sup>[1]</sup>. 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>Anesthetized rabbit model<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>0.16, 0.63 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral administration (p.o.); Once</td> </tr> <tr> <td>Result:</td> <td>Significantly attenuated the coronary occlusion produced marked ST segment elevation about 68 % at 0.63 mg/kg.</td> </tr> </table>	Animal Model:	Anesthetized rabbit model <sup>[1]</sup>	Dosage:	0.16, 0.63 mg/kg	Administration:	Oral administration (p.o.); Once	Result:	Significantly attenuated the coronary occlusion produced marked ST segment elevation about 68 % at 0.63 mg/kg.
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### REFERENCES

[1]. John GW, et al. KC 12291: an atypical sodium channel blocker with myocardial antiischemic properties. Cardiovasc Drug Rev. 2004 Spring;22(1):17-26.

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

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