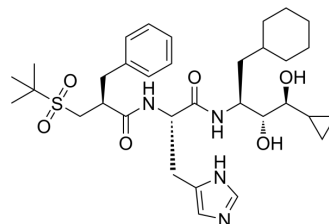


## Remikiren

<b>Cat. No.:</b>	HY-A0184
<b>CAS No.:</b>	126222-34-2
<b>Molecular Formula:</b>	C <sub>33</sub> H <sub>50</sub> N <sub>4</sub> O <sub>6</sub> S
<b>Molecular Weight:</b>	630.84
<b>Target:</b>	Renin
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Remikiren (Ro 42-5892) is an orally active and highly specific renin inhibitor. Remikiren specifically inhibits human renin and human plasma renin with IC <sub>50</sub> values of 0.7 and 0.8 nM, respectively. Remikiren also reduces mean arterial blood pressure in sodium-depleted marmosets and squirrel monkeys. Remikiren can be used in study of hypertension <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 0.7 nM (human pure renin), 0.8 nM (plasma renin of human) <sup>[1]</sup> .								
<b>In Vitro</b>	<p>Remikiren (0-10 nM; 1-3 h) displays a considerable specificity to inhibit renin<sup>[1]</sup>.            MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>Human pure renin, plasma renin of human, marmoset, squirrel monkey</td> </tr> <tr> <td>Concentration:</td> <td>0-10 nM</td> </tr> <tr> <td>Incubation Time:</td> <td>1-3 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited human pure renin and plasma renin of human, marmoset, squirrel monkey with IC<sub>50</sub> values of 0.7, 0.8, 1.0 and 1.7 nM, respectively.</td> </tr> </table>	Cell Line:	Human pure renin, plasma renin of human, marmoset, squirrel monkey	Concentration:	0-10 nM	Incubation Time:	1-3 h	Result:	Inhibited human pure renin and plasma renin of human, marmoset, squirrel monkey with IC <sub>50</sub> values of 0.7, 0.8, 1.0 and 1.7 nM, respectively.
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<b>In Vivo</b>	<p>Remikiren (0.1, 0.3, 1, 3, 10 mg/kg; p.o.; single) reduces mean arterial blood pressure in a dose-dependent manner in sodium-depleted marmosets and squirrel monkeys<sup>[1]</sup>.            Remikiren (3 mg/kg; p.o.; single) shows the duration of blood pressure decrease more than 24 h in sodium-depleted marmosets<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>Marmosets and squirrel monkeys (sodium-depleted)<sup>[1]</sup>.</td> </tr> <tr> <td>Dosage:</td> <td>0.1, 0.3, 1, 3, 10 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral administration; single.</td> </tr> <tr> <td>Result:</td> <td>Decreased mean arterial pressure (MAP) by 20-25 mm Hg when at 0.1 mg/kg. Reached the maximal decrease (30 mm Hg) of MAP with 1 mg/kg in marmosets.</td> </tr> </table>	Animal Model:	Marmosets and squirrel monkeys (sodium-depleted) <sup>[1]</sup> .	Dosage:	0.1, 0.3, 1, 3, 10 mg/kg	Administration:	Oral administration; single.	Result:	Decreased mean arterial pressure (MAP) by 20-25 mm Hg when at 0.1 mg/kg. Reached the maximal decrease (30 mm Hg) of MAP with 1 mg/kg in marmosets.
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	Decreasesd 35 mm Hg blood pressure with 3-10 mg/kg in squirrel monkeys.
Animal Model:	Marmosets (sodium-depleted) <sup>[1]</sup> .
Dosage:	3 mg/kg
Administration:	Oral administration; single.
Result:	Showed MAP fell by 30 mm Hg, which lasting more than 24 h.

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## REFERENCES

[1]. Fischli W, et al. Ro 42-5892 is a potent orally active renin inhibitor in primates. Hypertension. 1991 Jul;18(1):22-31.

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

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