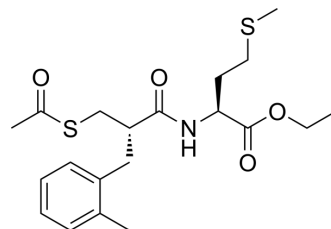


## SCH 42495

Cat. No.:	HY-101682
CAS No.:	136511-43-8
Molecular Formula:	C <sub>20</sub> H <sub>29</sub> NO <sub>4</sub> S <sub>2</sub>
Molecular Weight:	411.58
Target:	Neprilysin
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	SCH 42495 is an orally active neutral metalloendopeptidase (NEP) inhibitor with antihypertensive effect. SCH 42495 is the orally active ethylester proagent of SCH 42354 <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	NEP <sup>[1]</sup>								
<b>In Vitro</b>	SCH 42354 selectively inhibits hydrolysis of leu-enkephalin and ANF (IC <sub>50</sub> of 8.3 and 10.0 nM, respectively) in vitro <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
<b>In Vivo</b>	<p>SCH 42495 (30 mg/kg; oral gavage; twice daily) causes a significant reduction in the pulmonary vascular remodelling and ventricular hypertrophy in hypoxic rats after 10 days<sup>[2]</sup>.</p> <p>Treatment with SCH 42495 (30 mg/kg; oral gavage; twice daily) leads to a decrease in cardiovascular remodelling secondary to chronic hypoxia in rats<sup>[2]</sup>.</p> <p>SCH 42495 (oral doses of 1, 3, or 10 mg/kg) produces significant reductions in blood pressure in DOCA-N a hypertensive rats of 22±6, 43±7, and 62±12 mm Hg, respectively<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1" data-bbox="341 1365 1510 1680"> <tr> <td>Animal Model:</td> <td>Hypoxic rats<sup>[2]</sup></td> </tr> <tr> <td>Dosage:</td> <td>30 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral gavage; twice daily for 10 days</td> </tr> <tr> <td>Result:</td> <td>Caused a significant reduction in the pulmonary vascular remodelling and ventricular hypertrophy. Led to a decrease in cardiovascular remodelling secondary to chronic hypoxia.</td> </tr> </table>	Animal Model:	Hypoxic rats <sup>[2]</sup>	Dosage:	30 mg/kg	Administration:	Oral gavage; twice daily for 10 days	Result:	Caused a significant reduction in the pulmonary vascular remodelling and ventricular hypertrophy. Led to a decrease in cardiovascular remodelling secondary to chronic hypoxia.
Animal Model:	Hypoxic rats <sup>[2]</sup>								
Dosage:	30 mg/kg								
Administration:	Oral gavage; twice daily for 10 days								
Result:	Caused a significant reduction in the pulmonary vascular remodelling and ventricular hypertrophy. Led to a decrease in cardiovascular remodelling secondary to chronic hypoxia.								

### REFERENCES

[1]. Watkins RW, et al. Atrial natriuretic factor potentiating and hemodynamic effects of SCH 42495, a new, neutral metalloendopeptidase inhibitor. Am J Hypertens. 1993 May;6(5 Pt 1):357-68.

---

[2]. Thompson JS, et al. Effects of the neutral endopeptidase inhibitor, SCH 42495, on the cardiovascular remodelling secondary to chronic hypoxia in rats. Clin Sci (Lond). 1994 Jul;87(1):109-14.

---

**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](mailto:tech@MedChemExpress.com)

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