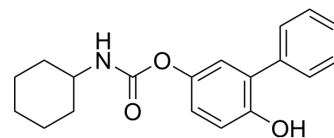


URB694

Cat. No.:	HY-W728451
CAS No.:	904672-77-1
Molecular Formula:	C ₁₉ H ₂₁ NO ₃
Molecular Weight:	311.37
Target:	FAAH
Pathway:	Metabolic Enzyme/Protease; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	URB694 is a carbamate FAAH inhibitor that irreversibly carbamoylate the nucleophile catalytic serine in FAAH active site. URB694 exhibits antidepressant-like activity and cardioprotective effects. URB694 can be used to prepare ¹¹ C-Carbonyl-URB694 for in vivo positron emission tomography (PET) imaging studies of the brain FAAH ^{[1][2]} .																
In Vivo	<p>URB694 (0.3 mg/kg; i.p.) increases the time spent by HAB rats on the open arms compared to vehicle condition, without affecting overall locomotor activity^[1].</p> <p>URB694 (0.3 mg/kg; i.p.) reduces isoproterenol hydrochloride (ISOP; HY-B0468)-induced arrhythmia occurrence in HAB rats, whereas it has no significant effects in NAB and LAB rats^[1].</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>5-month-old male Wistar rats (350-450 g) selectively bred for high (HAB) and low (LAB) anxiety-related behavior in the elevated plus-maze test or non-selected rats (NAB)^[1]</td> </tr> <tr> <td>Dosage:</td> <td>0.3 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Administered intraperitoneally to rats in a volume of 0.5 mL/kg</td> </tr> <tr> <td>Result:</td> <td>Significantly increased the time spent by HAB rats on the open arms. Had no effects on NABs' and LABs' behavioral performance in the elevated plus maze test.</td> </tr> </table> <table border="1"> <tr> <td>Animal Model:</td> <td>HAB, NAB and LAB rats^[1]</td> </tr> <tr> <td>Dosage:</td> <td>0.3 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Received the i.p. injection 30 min before ISOP (0.02 mg/kg)</td> </tr> <tr> <td>Result:</td> <td>Significantly reduced ISOP-induced arrhythmia occurrence in HAB rats compared to vehicle pretreatment condition. Had no significant effects in NAB and LAB rats.</td> </tr> </table>	Animal Model:	5-month-old male Wistar rats (350-450 g) selectively bred for high (HAB) and low (LAB) anxiety-related behavior in the elevated plus-maze test or non-selected rats (NAB) ^[1]	Dosage:	0.3 mg/kg	Administration:	Administered intraperitoneally to rats in a volume of 0.5 mL/kg	Result:	Significantly increased the time spent by HAB rats on the open arms. Had no effects on NABs' and LABs' behavioral performance in the elevated plus maze test.	Animal Model:	HAB, NAB and LAB rats ^[1]	Dosage:	0.3 mg/kg	Administration:	Received the i.p. injection 30 min before ISOP (0.02 mg/kg)	Result:	Significantly reduced ISOP-induced arrhythmia occurrence in HAB rats compared to vehicle pretreatment condition. Had no significant effects in NAB and LAB rats.
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REFERENCES

[1]. Carnevali L, et, al. Cardioprotective effects of fatty acid amide hydrolase inhibitor URB694, in a rodent model of trait anxiety. Sci Rep. 2015 Dec 14;5:18218.

[2]. Boileau I, et, al. Whole-body radiation dosimetry of ¹¹C-carbonyl-URB694: a PET tracer for fatty acid amide hydrolase. J Nucl Med. 2014 Dec;55(12):1993-7.

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

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