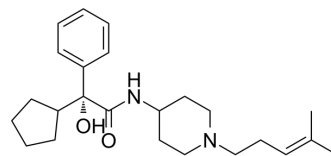


## J-104129

Cat. No.:	HY-129826
CAS No.:	244277-89-2
Molecular Formula:	C <sub>24</sub> H <sub>36</sub> N <sub>2</sub> O <sub>2</sub>
Molecular Weight:	384.55
Target:	mAChR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	J-104129 is a selective and orally active muscarinic M3 receptor antagonist ( $K_i = 4.2$ nM). J-104129 is effective in promoting bronchodilation <sup>[1][2]</sup> .								
<b>In Vivo</b>	<p>J-104129 (10 mg/kg; p.o.; single) shows durable bronchodilatory action lasting over 10 h in rats<sup>[1][2]</sup>.          J-104129 (p.o.) antagonizes ACh-induced bronchoconstriction with an ED<sub>50</sub> value of 0.58 mg/kg in rats<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>Male Sprague-Dawley rats<sup>[1][2]</sup>.</td> </tr> <tr> <td>Dosage:</td> <td>10 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral administration; single.</td> </tr> <tr> <td>Result:</td> <td>Exhibited bronchodilatory activity.</td> </tr> </table>	Animal Model:	Male Sprague-Dawley rats <sup>[1][2]</sup> .	Dosage:	10 mg/kg	Administration:	Oral administration; single.	Result:	Exhibited bronchodilatory activity.
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### REFERENCES

- [1]. Mitsuya M, et al. J-104129, a novel muscarinic M3 receptor antagonist with high selectivity for M3 over M2 receptors. *Bioorg Med Chem.* 1999 Nov;7(11):2555-67.
- [2]. Morihiro Mitsuya, et al. Discovery of a muscarinic M3 receptor antagonist with high selectivity for M3 over M2 receptors among 2-[(1S,3S)-3-sulfonylamino-cyclopentyl]phenylacetamide derivatives. *Bioorg Med Chem.* 2000, 8(4): 825-832.

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

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