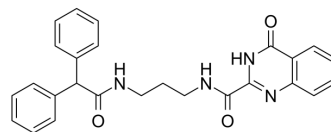


## JNc-440

<b>Cat. No.:</b>	HY-120514		
<b>CAS No.:</b>	1119503-63-7		
<b>Molecular Formula:</b>	C <sub>26</sub> H <sub>24</sub> N <sub>4</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	440.49		
<b>Target:</b>	TRP Channel; Potassium Channel		
<b>Pathway:</b>	Membrane Transporter/Ion Channel; Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 50 mg/mL (113.51 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
<b>Preparing Stock Solutions</b>	1 mM	2.2702 mL	11.3510 mL	22.7020 mL
	5 mM	0.4540 mL	2.2702 mL	4.5404 mL
	10 mM	0.2270 mL	1.1351 mL	2.2702 mL
Please refer to the solubility information to select the appropriate solvent.				
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.25 mg/mL (2.84 mM); Clear solution			

### BIOLOGICAL ACTIVITY

<b>Description</b>	JNc-440 is a potent antihypertensive agent. JNc-440 can enhance the interaction of TRPV4 and Ca <sup>2+</sup> -activated potassium channel 3 (KCa2.3) in endothelial cells. JNc-440 can also enhance vasodilation, and exerted antihypertensive effects in mice [1].		
<b>In Vivo</b>	JNc-440 (1 mg/kg; IV; single dosage) improves endothelium-dependent relaxation in small resistance arteries and to lower blood pressure <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
	<b>Animal Model:</b>	TRPV4 <sup>-/-</sup> and wild type C57BL/6J mice (hypertensive induced by NOS inhibitor Nω-nitro-L-arginine, AngII and high-salt diet) <sup>[1]</sup>	

Dosage:	1 mg/kg
Administration:	IV; single dosage
Result:	Increased the impaired TRPV4-KCa2.3 interaction to improve endothelium-dependent relaxation in small resistance arteries and to lower blood pressure.

## REFERENCES

[1]. He D, et al. Treatment of hypertension by increasing impaired endothelial TRPV4-KCa2.3 interaction. EMBO Mol Med. 2017 Nov;9(11):1491-1503.

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

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