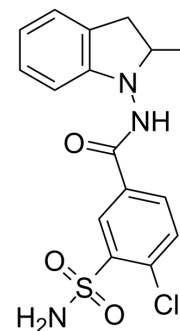


## Indapamide

<b>Cat. No.:</b>	HY-B0259		
<b>CAS No.:</b>	26807-65-8		
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>16</sub> ClN <sub>3</sub> O <sub>3</sub> S		
<b>Molecular Weight:</b>	365.83		
<b>Target:</b>	Potassium Channel		
<b>Pathway:</b>	Membrane Transporter/Ion Channel		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 100 mg/mL (273.35 mM)  
 H<sub>2</sub>O : < 0.1 mg/mL (insoluble)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.7335 mL	13.6676 mL	27.3351 mL
	5 mM	0.5467 mL	2.7335 mL	5.4670 mL
	10 mM	0.2734 mL	1.3668 mL	2.7335 mL

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: ≥ 2.5 mg/mL (6.83 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: ≥ 2.5 mg/mL (6.83 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.5 mg/mL (6.83 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Indapamide is an orally active sulphonamide diuretic agent, that can reduce blood pressure by decreasing vascular reactivity and peripheral vascular resistance. Indapamide is also can reduce left ventricular hypertrophy<sup>[1][4]</sup>.

#### In Vitro

Indapamide (0.1-500 mg/L; 20min) reduces total insulin secretory response to glucose infusions in isolated perfused rat pancreas<sup>[2]</sup>.

	Indapamide (1-100 $\mu$ M) increases osteoblast proliferation and decreased bone resorption <sup>[3]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	Indapamide (1 mg/kg/d; gastric gavage for 8 weeks) lowers blood pressure in spontaneously hypertensive rats (SHRs) <sup>[4]</sup> . Indapamide (10 mg/kg/d) decreases pressor response to oxotremorine, noradrenaline, and tyramine in rats <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
	Animal Model: Male spontaneously hypertensive rats (11 weeks) <sup>[4]</sup>
	Dosage: 1 mg/kg
	Administration: Gastric gavage per day for 8 weeks
	Result: Decreased blood pressure by 16.9 mm Hg. Increased the dp/dt <sub>max</sub> , ejection fraction (EF) and fractional shortening (FS).

## REFERENCES

- [1]. Chaffman, M, et, al. Indapamide. Drugs 28, 189–235 (1984).
- [2]. Furman BL, et, al. A further examination of the possible effects of indapamide on glucose tolerance and insulin secretion in the rat and mouse. J Pharm Pharmacol. 1981 Nov;33(11):735-7.
- [3]. Lalande A, et, al. Indapamide, a thiazide-like diuretic, decreases bone resorption in vitro. J Bone Miner Res. 2001 Feb;16(2):361-70.
- [4]. Ma F, et, al. Indapamide lowers blood pressure by increasing production of epoxyeicosatrienoic acids in the kidney. Mol Pharmacol. 2013 Aug;84(2):286-95.

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

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