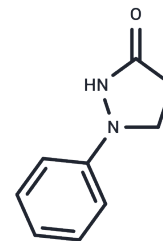


## Phenidone

## Chemical Properties

CAS No. :	92-43-3
Formula:	C <sub>9</sub> H <sub>10</sub> N <sub>2</sub> O
Molecular Weight:	162.19
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	Phenidone (1-phenyl-3-pyrazolidinone) is a dual inhibitor of cyclooxygenases and lipoxygenases that ameliorates rat paralysis in experimental autoimmune encephalomyelitis by suppressing its target enzymes[1]. The lipoxygenase inhibitor phenidone is a potent hypotensive agent in the spontaneously hypertensive rat[2].
Targets(IC50)	COX,Lipoxygenase
In vitro	Western blot analysis showed that phenidone significantly inhibited the increases in COX-1/-2 and 5-LOX in the spinal cords of rats with EAE[1].
In vivo	Lipoxygenase inhibitor phenidone markedly attenuates angiotensin II (All) induced vascular contractility. Phenidone was also shown to inhibit the formation of vascular lipoxygenase products and to reduce blood pressure in the All-dependent renovascular hypertensive rat[2].

## Solubility Information

Solubility	DMSO: 99 mg/mL (610.4 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	6.1656 mL	30.828 mL	61.6561 mL
5 mM	1.2331 mL	6.1656 mL	12.3312 mL
10 mM	0.6166 mL	3.0828 mL	6.1656 mL
50 mM	0.1233 mL	0.6166 mL	1.2331 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

- Moon C, et al. Phenidone, a dual inhibitor of cyclooxygenases and lipoxygenases, ameliorates rat paralysis in experimental autoimmune encephalomyelitis by suppressing its target enzymes. *Brain Res.* 2005;1035(2):206-210.
- Stern N, et al. The lipoxygenase inhibitor phenidone is a potent hypotensive agent in the spontaneously hypertensive rat. *Am J Hypertens.* 1993;6(1):52-58.
- Petrakiev A, et al. Emission spectral analysis using photographic plates treated with a phenidone developer. *Talanta.* 1969;16(12):1583-1587.

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