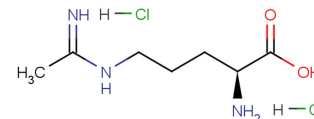


## L-NIO dihydrochloride

## Chemical Properties

CAS No.:	159190-44-0
Formula:	C <sub>7</sub> H <sub>17</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>2</sub>
Molecular Weight:	246.13
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



## Biological Description

Description	L-NIO dihydrochloride induces a consistent focal ischemic infarct in rats. L-NIO dihydrochloride is a potent, non-selective and NADPH-dependent nitric oxide synthase (NOS) inhibitor, with $K_{is}$ of 1.7, 3.9, 3.9 $\mu$ M for neuronal (nNOS), endothelial (eNOS), and inducible (iNOS), respectively.
Targets(IC <sub>50</sub> )	nNOS: $k_i$ : 1.7 $\mu$ M eNOS: 3.9 $\mu$ M ( $k_i$ ) iNOS( $k_i$ ): 3.9 $\mu$ M ( $k_i$ )
In vitro	L-NIO is a non-selective, potent and NADPH-dependent nitric oxide synthase (NOS) inhibitor, with $K_{is}$ of 1.7, 3.9, 3.9 $\mu$ M for neuronal (nNOS), endothelial (eNOS), and inducible (iNOS), respectively.
In vivo	L-NIO causes focal cerebral ischemia in the adult rat brain.

## Solubility Information

Solubility	H <sub>2</sub> O: 50 mg/mL (203.14 mM) DMSO: 33.33 mg/mL (135.42 mM) ( < 1 mg/mL refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.063 mL	20.314 mL	40.629 mL
5 mM	0.813 mL	4.063 mL	8.126 mL
10 mM	0.406 mL	2.031 mL	4.063 mL
50 mM	0.081 mL	0.406 mL	0.813 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

## Reference

1. Babu BR, et al. N<sup>5</sup>-(1-Imino-3-butenyl)-L-ornithine. A neuronal isoform selective mechanism-based inactivator of nitric oxide synthase. J Biol Chem. 1998 Apr 10;273(15):8882-9.
2. Van Slooten AR, et al. L-NIO as a novel mechanism for inducing focal cerebral ischemia in the adult rat brain. J Neurosci Methods. 2015 Apr 30;245:44-57.

Inhibitors · Natural Compounds · Compound Libraries

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