



## L-NMMA acetate

Catalog No: tcsc0014213

Available Sizes
Size: 10mg
Size: 25mg
Size: 50mg
Size: 100mg
Specifications
CAS No: 53308-83-1
<b>Formula:</b> $C_9^{H_{20}^{}N_4^{}O_4^{}}$
Pathway: Immunology/Inflammation
Target: NO Synthase
Purity / Grade: >98%
<b>Solubility:</b> H2O : ≥ 50 mg/mL (201.39 mM)
Alternative Names: Tilarginine acetate;Methylarginine acetate
Observed Molecular Weight: 248.28





## **Product Description**

L-NMMA acetate is a **nitric oxide synthase** inhibitor of all NOS isoforms including NOS1, NOS2, and NOS3. The  $\mathbf{K_i}$  values for nNOS (rat), eNOS (human), and iNOS (mouse) are approximately 0.18, 0.4, and 6  $\mu$ M, respectively.

IC50 & Target: Ki: 0.18  $\mu$ M (nNOS), 0.4  $\mu$ M (eNOS), 6  $\mu$ M (iNOS)<sup>[1]</sup>

In Vitro: L-NMMA, starting from 100 μM, produces a concentration-dependent inhibition of the evoked relaxations (2Hz); maximal inhibition at 1 mM averaged about 35%. The inhibitory effect of L-NMMA is unchanged by previous incubation with D-arginine while it is prevented by L-arginine (L-Arg). L-NMMA does not affect isoprenaline-induced relaxation<sup>[2]</sup>. Superfusion of L-NMMA reduces arteriolar diameter and causes dose-dependent increases in arteriolar tone. The onset of action of L-NMMA is nearly immediate. L-NMMA inhibits vasodilator responses to the endothelium-dependent vasodilator ACh but not to the endothelium-independent NP. NE induced dose-related vasoconstriction that is significantly potentiated by L-NMMA<sup>[3]</sup>.

$$\begin{array}{c} NH & O \\ NH_1 & NH_2 \\ O \\ OH \end{array}$$

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!