Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

L-NMMA acetate

Catalog No: tcsc0014213

Available Sizes

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
53308-83-1

Formula:
$C_9H_{20}N_4O_4$

Pathway:
Immunology/Inflammation

Target:
NO Synthase

Purity / Grade:
>98%

Solubility:
H2O : ≥ 50 mg/mL (201.39 mM)

Alternative Names:
Tilarginine acetate;Methylarginine acetate

Observed Molecular Weight:
248.28

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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 μM, respectively.

IC50 & Target: Ki: 0.18 μM (nNOS), 0.4 μM (eNOS), 6 μM (iNOS)[1]

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[2]. 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[3].