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DATASHEET

L-NMMA

Product overview

Name	L-NMMA
Cat No	HB1353
Biological action	Inhibitor
Purity	>95% (NMR)
Description	Competitive, selective NOS inhibitor

Images



Biological Data

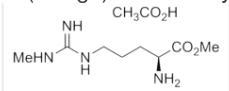
Biological description	Competitive and selective nitric oxide synthase (NOS) inhibitor (IC_{50} values are 6.6, 4.9 and 3.5 μM for iNOS, nNOS and eNOS respectively). Also inhibits cyclic GMP ($IC_{50} = 2.9 \mu\text{M}$). Displays hypertensive properties.
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Solubility & Handling

Solubility overview	Soluble in water (50 mM)
Storage instructions	Room temperature
Storage of solutions	Prepare and use solutions on the same day if possible. Store solutions at -20°C for up to one month if storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.
Shipping Conditions Important	Stable for ambient temperature shipping. Follow storage instructions on receipt. This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	N(omega)-Monomethyl-L-Arginine Acetate
Molecular Weight	248.28
Chemical structure	<input type="text"/>

Chemical name	N(omega)-Monomethyl-L-Arginine Acetate
	
Molecular Formula	C ₇ H ₁₆ N ₄ O ₂ ·CH ₃ CO ₂ H
CAS Number	53308-83-1
PubChem identifier	135242
SMILES	CC(=O)O.CN=C(N)NCCC[C@@H](C(=O)O)N
InChi	InChI=1S/C7H16N4O2.C2H4O2/c1-10-7(9)11-4-2-3-5(8)6(12)13;1-2(3)4/h5H,2-4,8H2,1H3,(H,12,13)(H3,9,10,11);1H3,(H,3,4)/t5-;/m0./s1
InChiKey	IKPNWIGTWUZCKM-JEDNCBNOSA-N
MDL number	MFCD00069311
Appearance	White solid

References

Characterization of three inhibitors of endothelial nitric oxide synthase in vitro and in vivo.

Rees DD *et al* (1990) Br J Pharmacol 101(3)

PubMedID [1706208](#)

Nitric oxide synthases: structure, function and inhibition.

Alderton WK *et al* (2001) Biochem J 357(Pt 3)

PubMedID [11463332](#)

L-NMMA (a nitric oxide synthase inhibitor) is effective in the treatment of cardiogenic shock.

Cotter G *et al* (2000) Circulation 101(12)

PubMedID [10736276](#)

Evidence for the pathophysiological role of endogenous methylarginines in regulation of endothelial NO production and vascular function.

Cardounel AJ *et al* (2007) J Biol Chem 282(2)

PubMedID [17082183](#)