SDMA-d_6

Cat. No.: HY-101410S

CAS No.: 1331888-08-4

Molecular Formula: $C_8H_{12}D_6N_4O_2$

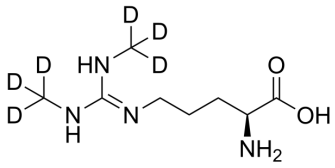
Molecular Weight: 208.29

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

Storage: -20°C, stored under nitrogen

* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

H_2O : 125 mg/mL (600.12 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.8010 mL	24.0050 mL	48.0100 mL
	5 mM	0.9602 mL	4.8010 mL	9.6020 mL
	10 mM	0.4801 mL	2.4005 mL	4.8010 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

SDMA-d_6 is the deuterium labeled SDMA. SDMA (Symmetric dimethylarginine) is an endogenous inhibitor of nitric oxide (NO) synthase activity[1][2].

In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Bode-Böger SM,et al. Symmetrical dimethylarginine: a new combined parameter for renal function and extent ofcoronary artery disease.

[3]. Schepers E, et al. Symmetric dimethylarginine as a proinflammatory agent in chronic kidney disease.Clin J Am Soc Nephrol. 2011 Oct;6(10):2374-83.

[4]. Nabity MB, et al. Symmetric Dimethylarginine Assay Validation, Stability, and Evaluation as a Marker for the EarlyDetection of Chronic Kidney Disease in Dogs. J Vet

Intern Med. 2015 Jul-Aug;29(4):1036-44.

[5]. Veldink H, et al. Effects of chronic SDMA infusion on glomerular filtration rate, blood pressure, myocardial function and renal histology in C57BL6/J mice. Nephrol Dial Transplant. 2013 Jun;28(6):1434-9.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA