
Product Data Sheet

Product Name: SDMA-d6

Cat. No.: GC64357

Chemical Properties

Cas. No. 1331888-08-4

Formula C₈H₁₂D₆N₄O₂

M.Wt 208.29

Solubility H₂O : 125 mg/mL (600.12 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

SDMA-d6 (Symmetric dimethylarginine-d6) is the deuterium labeled SDMA. SDMA (Symmetric dimethylarginine) is an endogenous inhibitor of nitric oxide (NO) synthase activity[1][2].

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].

[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 of coronary 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]. Nability MB, et al. Symmetric Dimethylarginine Assay Validation, Stability, and Evaluation as a Marker for the Early Detection of Chronic Kidney Disease in Dogs. *J Vet Intern Med.* 2015 Jul-Aug;29(4):1036-44.

Caution: Product has not been fully validated for medical applications. For research use only.

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[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.

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