SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

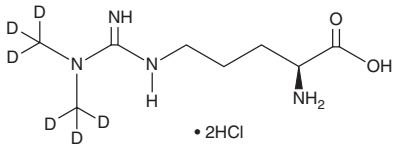
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

N^G,N^G-dimethyl-L-Arginine-d_6 (hydrochloride)

Item No. 33266

CAS Registry No.: 1313730-20-9
Formal Name: N^5-[(dimethylamino)iminomethyl]-L-ornithine-d_6, dihydrochloride
Synonyms: ADMA-d_6, Asymmetric dimethylarginine-d_6
MF: $C_8H_{12}D_6N_4O_2 \bullet 2HCl$
FW: 281.2
Chemical Purity: ≥95% (N^G,N^G-dimethyl-L-arginine)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_6); ≤1% d_0
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

N^G,N^G-dimethyl-L-arginine-d_6 (ADMA-d_6) (hydrochloride) is intended for use as an internal standard for the quantification of N^G,N^G-dimethyl-L-arginine (Item No. 80230) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

ADMA-d_6 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the ADMA-d_6 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. ADMA-d_6 (hydrochloride) is slightly soluble in DMSO (heated and sonicated).

ADMA-d_6 (hydrochloride) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

ADMA is an endogenous inhibitor of nitric oxide synthase (NOS).[1,2] It is formed from arginine by protein arginine methyltransferases (PRMTs) and degraded by dimethylarginine dimethylaminohydrolases (DDAHs) and alanine-glyoxylate aminotransferase 2 (AGXT2).[1] ADMA levels are increased concomitant with an increase in blood pressure in Dahl salt-sensitive rats fed a high-salt diet.[2] ADMA levels are increased in the plasma in a variety of endothelial dysfunction-related diseases, including hypertension, congestive heart failure, and end-stage renal disease.[1,3,4]

References

1. Sydow, K. and Münzel, T. ADMA and oxidative stress. *Atheroscler. Suppl.* **4(4)**, 41-51 (2003).
2. Jin, J.S. and D'Alecy, L.G. Central and peripheral effects of asymmetric dimethylarginine, an endogenous nitric oxide synthetase inhibitor. *J. Cardiovasc. Pharmacol.* **28(3)**, 439-446 (1996).
3. Vallance, P., Leone, A., Calver, A., *et al.* Accumulation of an endogenous inhibitor of nitric oxide synthesis in chronic renal failure. *Lancet* **339(8793)**, 572-575 (1992).
4. Matsuoka, H., Itoh, S., Kimoto, M., *et al.* Asymmetrical dimethylarginine, an endogenous nitric oxide synthase inhibitor, in experimental hypertension. *Hypertension* **29(1 Pt 2)**, 242-247 (1997).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM