



# 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

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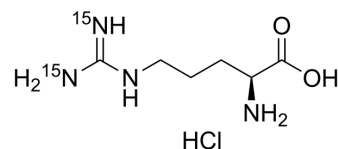
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## L-Arginine-<sup>15</sup>N<sub>2</sub> hydrochloride

<b>Cat. No.:</b>	HY-N0455AS
<b>CAS No.:</b>	204633-92-1
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>15</sub> ClN <sub>2</sub> <sup>15</sup> N <sub>2</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	212.65
<b>Target:</b>	NO Synthase; Endogenous Metabolite
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease
<b>Storage:</b>	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : ≥ 25 mg/mL (117.56 mM)  
\* "≥" means soluble, but saturation unknown.

Concentration	Mass		
	1 mg	5 mg	10 mg
<b>1 mM</b>	4.7026 mL	23.5128 mL	47.0256 mL
<b>5 mM</b>	0.9405 mL	4.7026 mL	9.4051 mL
<b>10 mM</b>	0.4703 mL	2.3513 mL	4.7026 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L-Arginine-<sup>15</sup>N<sub>2</sub> (hydrochloride) is the <sup>15</sup>N-labeled L-Arginine (hydrochloride). L-Arginine hydrochloride ((S)-(+)-Arginine hydrochloride) is the nitrogen donor for synthesis of nitric oxide, a potent vasodilator that is deficient during times of sickle cell crisis.

#### 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<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Bakker J, et al. Administration of the nitric oxide synthase inhibitor NG-methyl-L-arginine hydrochloride (546C88) by intravenous infusion for up to 72 hours can promote the resolution of shock in patients with severe sepsis: results of a randomized, double-blind, placebo-controlled multicenter study (study no. 144-002). Crit Care Med. 2004 Jan;32(1):1-12.

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[2]. Tapiero H, et al. L-Arginine. Biomed Pharmacother. 2002 Nov;56(9):439-45.

[3]. Yamada M, et al. Endothelial nitric oxide synthase-dependent cerebral blood flow augmentation by L-arginine after chronic statin treatment. J Cereb Blood Flow Metab. 2000 Apr;20(4):709-17.

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

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

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