



# 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

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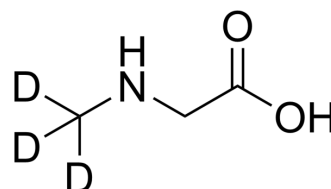
[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic)



## Sarcosine-d<sub>3</sub>

|                    |                                                                                         |
|--------------------|-----------------------------------------------------------------------------------------|
| Cat. No.:          | HY-101037S1                                                                             |
| CAS No.:           | 118685-91-9                                                                             |
| Molecular Formula: | C <sub>3</sub> H <sub>4</sub> D <sub>3</sub> NO <sub>2</sub>                            |
| Molecular Weight:  | 92.11                                                                                   |
| Target:            | GlyT; Endogenous Metabolite; Isotope-Labeled Compounds                                  |
| Pathway:           | Membrane Transporter/Ion Channel; Neuronal Signaling; Metabolic Enzyme/Protease; Others |
| Storage:           | Powder    -20°C    3 years<br>In solvent   -80°C    6 months<br>-20°C    1 month        |



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 125 mg/mL (1357.07 mM; Need ultrasonic)

|                           | Solvent<br>Concentration | Mass | 1 mg       | 5 mg       | 10 mg       |
|---------------------------|--------------------------|------|------------|------------|-------------|
|                           |                          |      |            |            |             |
| Preparing Stock Solutions | 1 mM                     |      | 10.8566 mL | 54.2829 mL | 108.5658 mL |
|                           | 5 mM                     |      | 2.1713 mL  | 10.8566 mL | 21.7132 mL  |
|                           | 10 mM                    |      | 1.0857 mL  | 5.4283 mL  | 10.8566 mL  |

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

### BIOLOGICAL ACTIVITY

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description               | Sarcosine-d <sub>3</sub> is the deuterium labeled Sarcosine. Sarcosine (N-Methylglycine), an endogenous amino acid, is a competitive glycine transporter type I (GlyT1) inhibitor and N-methyl-D-aspartate (NMDA) receptor co-agonist. Sarcosine increases the glycine concentration, resulting in an indirect potentiation of the NMDA receptor. Sarcosine is commonly used for the research of schizophrenia[1][2].          |
| IC <sub>50</sub> & Target | GlyT1                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 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> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

### REFERENCES

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- [1]. Katarzyna Socala, et al. Effects of sarcosine, a glycine transporter type 1 inhibitor, in two mouse seizure models. Pharmacol Rep. Mar-Apr 2010;62(2):392-7.
- [2]. Mei-Yi Lee, et al. Effects of sarcosine and N, N-dimethylglycine on NMDA receptor-mediated excitatory field potentials. J Biomed Sci. 2017; 24: 18.
- [3]. 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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