



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### 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

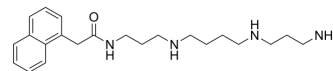
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

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

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## Naspm

|                    |                                                                                                                                                                                 |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cat. No.:          | HY-12506                                                                                                                                                                        |
| CAS No.:           | 122306-11-0                                                                                                                                                                     |
| Molecular Formula: | C <sub>22</sub> H <sub>34</sub> N <sub>4</sub> O                                                                                                                                |
| Molecular Weight:  | 370.53                                                                                                                                                                          |
| Target:            | iGluR                                                                                                                                                                           |
| Pathway:           | Membrane Transporter/Ion Channel; Neuronal Signaling                                                                                                                            |
| Storage:           | <div>Pure form    -20°C    3 years</div> <div>                  4°C        2 years</div> <div>In solvent    -80°C    2 years</div> <div>                  -20°C    1 year</div> |



### SOLVENT & SOLUBILITY

|                                                                               |                                                                                                                                        |                                      |      |           |            |            |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------|-----------|------------|------------|
| In Vitro                                                                      | DMSO : 10 mg/mL (26.99 mM; Need ultrasonic)                                                                                            |                                      |      |           |            |            |
|                                                                               | Preparing Stock Solutions                                                                                                              | <div>Solvent<br/>Concentration</div> | Mass | 1 mg      | 5 mg       | 10 mg      |
|                                                                               |                                                                                                                                        | 1 mM                                 |      | 2.6988 mL | 13.4942 mL | 26.9884 mL |
|                                                                               |                                                                                                                                        | 5 mM                                 |      | 0.5398 mL | 2.6988 mL  | 5.3977 mL  |
|                                                                               |                                                                                                                                        | 10 mM                                |      | 0.2699 mL | 1.3494 mL  | 2.6988 mL  |
| Please refer to the solubility information to select the appropriate solvent. |                                                                                                                                        |                                      |      |           |            |            |
| In Vivo                                                                       | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline<br>Solubility: ≥ 1 mg/mL (2.70 mM); Clear solution |                                      |      |           |            |            |
|                                                                               | 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)<br>Solubility: ≥ 1 mg/mL (2.70 mM); Clear solution            |                                      |      |           |            |            |
|                                                                               | 3. Add each solvent one by one: 10% DMSO >> 90% corn oil<br>Solubility: ≥ 1 mg/mL (2.70 mM); Clear solution                            |                                      |      |           |            |            |

### BIOLOGICAL ACTIVITY

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description | Naspm (1-Naphthyl acetyl spermine), a synthetic analogue of Joro spider toxin, is a calcium permeable AMPA (CP-AMPA) receptors antagonist.                                                                                                                                                                                                                                                                                                                                                                                    |
| In Vitro    | NASPM selectively suppresses the inwardly rectifying and Ca <sup>2+</sup> -permeable AMPA receptors expressed in type II neurons. It has no effect on AMPA receptors in type I neurons. At -60 mV, NASPM suppresses AMPA receptors in type II neurons with an IC <sub>50</sub> value of 0.33 μM. The blocking effect of NASPM on the Ca <sup>2+</sup> -permeable AMPA receptors is use and voltage-dependent <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

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## CUSTOMER VALIDATION

- Cell Rep. 2023 Dec 3;42(12):113551.
- Cell Rep. 2020 Nov 10;33(6):108369.
- J Headache Pain. 2022 Aug 10;23(1):98.
- Neurobiol Dis. 2024 Mar 8:106471.
- iScience. 2023 Mar.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Koike M, et al. Blocking effect of 1-naphthyl acetyl spermine on Ca<sup>2+</sup>-permeable AMPA receptors in cultured rat hippocampal neurons. Neurosci Res. 1997 Sep;29(1):27-36.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

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