



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

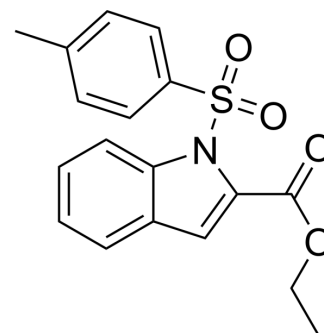
[www.szabo-scandic.com](http://www.szabo-scandic.com)

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



## NOD-IN-1

Cat. No.:	HY-100691
CAS No.:	132819-92-2
Molecular Formula:	C <sub>18</sub> H <sub>17</sub> NO <sub>4</sub> S
Molecular Weight:	343.4
Target:	NOD-like Receptor (NLR)
Pathway:	Immunology/Inflammation
Storage:	<div>Powder</div> <div>-20°C 3 years</div> <div>4°C 2 years</div> <div>In solvent</div> <div>-80°C 2 years</div> <div>-20°C 1 year</div>



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (291.21 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div><div>Solvent</div><div>Concentration</div></div>	Mass	1 mg	5 mg	10 mg
		1 mM		2.9121 mL	14.5603 mL	29.1206 mL
		5 mM		0.5824 mL	2.9121 mL	5.8241 mL
		10 mM		0.2912 mL	1.4560 mL	2.9121 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 Solubility: ≥ 2.5 mg/mL (7.28 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.28 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.28 mM); Clear solution					

### BIOLOGICAL ACTIVITY

Description	NOD-IN-1 is a potent mixed inhibitor of nucleotide-binding oligomerization domain (NOD)-like receptors, NOD1 and NOD2, with IC <sub>50</sub> of 5.74 μM and 6.45 μM, respectively.	
IC <sub>50</sub> & Target	NOD1	NOD2
In Vitro	NOD-IN-1 (compound 4) is potent mixed inhibitor of NOD1 and NOD2, displaying a balanced inhibitory activity on both targets in the low micromolar range. NOD-IN-1 (IC <sub>50</sub> (NOD1)=5.74 μM; IC <sub>50</sub> (NOD2)=6.45 μM) is identified as the best of the	

series, possessing NOD1- and NOD2-inhibitory activities in the lower micromolar range. These results show that NOD-IN-1 is 7-fold less potent than Noditinib-1 in terms of NOD1 inhibition and completely devoid of selective activity for NOD1 or NOD2 as opposed to Noditinib-1. NOD-IN-1 exhibits balanced dual activities of less than 10  $\mu$ M on the two targets<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## PROTOCOL

### Cell Assay <sup>[1]</sup>

An MTS assay in which the proliferation rates of HEK-Blue NOD1 cells are measured in the presence of Noditinib-1 and of the synthesized potential NOD1 inhibitor NOD-IN-1 is employed to screen these compounds for potential cytotoxicity. Cells are treated for 24 h with the compound of interest at concentrations of up to 25  $\mu$ M. Comparison of the resulting metabolic activities with that of the untreated control showed that all compounds are well tolerated by HEK-Blue NOD1 cells, since their residual metabolic activities do not fall below 80% at the maximum concentration tested<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- Nat Biomed Eng. 2021 Nov 8.
- J Hazard Mater. 2021 Jan 15;402:123527.
- Front Cell Infect Microbiol. 2020 May 5;10:196.
- Cell Signal. 2022 Feb 14;93:110283.
- Mol Oral Microbiol. 2021 Mar 14.

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

## REFERENCES

[1]. Kecek Plesec K, et al. Identification of indole scaffold-based dual inhibitors of NOD1 and NOD2. Bioorg Med Chem. 2016 Nov 1;24(21):5221-5234.

**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