



# SZABO SCANDIC

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## 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

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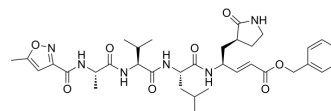
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## Mpro inhibitor N3

<b>Cat. No.:</b>	HY-136149
<b>CAS No.:</b>	884650-98-0
<b>Molecular Formula:</b>	C <sub>35</sub> H <sub>48</sub> N <sub>6</sub> O <sub>8</sub>
<b>Molecular Weight:</b>	680.79
<b>Target:</b>	SARS-CoV; Virus Protease
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 20 mg/mL (29.38 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.4689 mL	7.3444 mL	14.6888 mL
	5 mM	0.2938 mL	1.4689 mL	2.9378 mL
	10 mM	0.1469 mL	0.7344 mL	1.4689 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Mpro inhibitor N3 is a potent SARS-CoV-2 MPro inhibitor with an EC<sub>50</sub> value of 16.77 μM. Mpro inhibitor N3 shows antiviral activities against HCoV-229E, FIPV, IBV and MHV-A59<sup>[1][2][3]</sup>.

#### In Vitro

Mpro inhibitor N3 (0-100 μM) shows antiviral activities with an EC<sub>50</sub> value of 16.77 μM for SARS-CoV-2<sup>[1]</sup>.  
Mpro inhibitor N3 (0-50 μM; 14 h) inhibits the viral growth with the IC<sub>50</sub> values of 4, 8.8, 2.7 μM for HCoV-229E, FIPV, IBV and MHV-A59, respectively<sup>[2]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

Mpro inhibitor N3 (0-0.64 μM; 3, 6 h) shows antiviral activity against IBV in chicken , embryos<sup>[3]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Chicken embryos <sup>[3]</sup>
Dosage:	0-0.64 μM
Administration:	3, 6 h with 100-EID50 titer of IBV M41 virus

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Result:	Showed that N3 is able to penetrate cells to inhibit the replication of IBV viruses, probably at the beginning of infection, with the PD <sub>50</sub> of 0.13 μmol for the 3-h group and 0.17 μmol for the 6-h group.
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## REFERENCES

- [1]. Jin Z, et al. Structure of Mpro from SARS-CoV-2 and discovery of its inhibitors. *Nature*. 2020 Jun;582(7811):289-293.
- [2]. Yang H, et al. Design of wide-spectrum inhibitors targeting coronavirus main proteases. *PLoS Biol*. 2005 Oct;3(10):e324.
- [3]. Xue X, et al. Structures of two coronavirus main proteases: implications for substrate binding and antiviral drug design. *J Virol*. 2008 Mar;82(5):2515-27.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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