



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

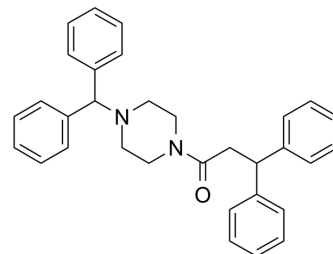
mail@szabo-scandic.com

www.szabo-scandic.com

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

NP118809

Cat. No.:	HY-14462		
CAS No.:	41332-24-5		
Molecular Formula:	$C_{32}H_{32}N_2O$		
Molecular Weight:	460.61		
Target:	Calcium Channel		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (108.55 mM; Need ultrasonic)				
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
		1 mM	2.1710 mL	10.8552 mL	21.7103 mL
		5 mM	0.4342 mL	2.1710 mL	4.3421 mL
		10 mM	0.2171 mL	1.0855 mL	2.1710 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 (5.43 mM); Suspended solution; Need ultrasonic and warming				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.43 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.43 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	NP118809 is a potent N-type calcium channel blocker, with an IC_{50} of 0.11 μ M; also less potently inhibits L-type calcium channel with an IC_{50} of 12.2 μ M.	
IC_{50} & Target	N-type calcium channel 0.11 μ M (IC_{50})	L-type calcium channel 12.2 μ M (IC_{50})
In Vitro	NP118809 is a potent N-type calcium channel blocker, with an IC_{50} of 0.11 μ M; also inhibits L-type calcium channel with an	

	IC₅₀ of 12.2 μM. NP118809 inhibits the hERG potassium channel in HEK cells, with an IC₅₀ of 7.4 μM^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	NP118809 (25 mg/kg, i.p.) shows significant analgesic activity in the phase IIA portions of the rat formalin model^[1]. NP118809 (30 mg/kg, p.o.) results in 80.3% inhibition of mechanical allodynia and 96.3% inhibition of thermal hyperalgesia in the rat spinal nerve ligation model^[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Zamponi GW, et al. Scaffold-based design and synthesis of potent N-type calcium channel blockers. *Bioorg Med Chem Lett*. 2009 Nov 15;19(22):6467-72.
- [2]. Pajouhesh H, et al. Structure-activity relationships of diphenylpiperazine N-type calcium channel inhibitors. *Bioorg Med Chem Lett*. 2010 Feb 15;20(4):1378-83.

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

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