



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 Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

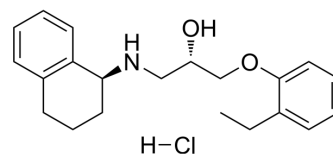
www.szabo-scandic.com

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



SR59230A hydrochloride

Cat. No.:	HY-103200
CAS No.:	1135278-41-9
Molecular Formula:	C ₂₁ H ₂₈ ClNO ₂
Molecular Weight:	361.91
Target:	Adrenergic Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (690.78 mM; Need ultrasonic)				
	H ₂ O : 2.5 mg/mL (6.91 mM; Need ultrasonic)				
	Preparing Stock Solutions	Mass	1 mg	5 mg	10 mg
		Solvent			
		Concentration			
		1 mM	2.7631 mL	13.8156 mL	27.6312 mL
In Vivo		5 mM	0.5526 mL	2.7631 mL	5.5262 mL
		10 mM	0.2763 mL	1.3816 mL	2.7631 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: ≥ 2.08 mg/mL (5.75 mM); Clear solution			
		2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)			
In Vivo		Solubility: ≥ 2.08 mg/mL (5.75 mM); Clear solution			
		3. Add each solvent one by one: 10% DMSO >> 90% corn oil			
In Vivo		Solubility: ≥ 2.08 mg/mL (5.75 mM); Clear solution			

BIOLOGICAL ACTIVITY

Description	SR59230A hydrochloride is a potent, selective, and blood-brain barrier penetrating β ₃ -adrenergic receptor antagonist ^[1] with IC ₅₀ s of 40, 408, and 648 nM for β ₃ , β ₁ , and β ₂ receptors, respectively ^[2] .
IC ₅₀ & Target	β adrenergic receptor
In Vitro	SR59230A (100 nM-50 μM; 24 hours) is able to reduce cell viability in a dose-dependent manner? in Neuro-2A, BE(2)C and SK-N-BE(2) NB cell lines ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay^[3]

Cell Line:	Three different neuroblastoma (NB) cell lines, one murine (Neuro-2A) and two human (SK-N-BE(2), BE(2)C)
Concentration:	100 nM, 1 μ M, 5 μ M, 10 μ M, and 50 μ M
Incubation Time:	24 hours
Result:	Reduced cell viability in a dose-dependent manner, with significant effect at a concentration limit over 1 μ M for Neuro-2A cells and 5 μ M for SK-N-BE(2) and BE(2)C).

In Vivo

MDMA (20 mg/kg) produces a slowly developing hyperthermia, reaching a maximum increase of 1.8°C at 130 min post injection. SR59230A (0.5 mg/kg) produces a small but significant attenuation of the slowly developing hyperthermia to MDMA. SR59230A (5 mg/kg) reveals a significant and marked early hypothermic reaction to MDMA^[4]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male C-57BL6J wild-type mice (22-35 g) ^[4]
Dosage:	0.5 or 5 mg/kg
Administration:	Injected s.c.; administered 30 min prior to the injection s.c. of MDMA (20 mg/kg).
Result:	Modulated the actions of MDMA on temperature involve α 1-adrenoceptor antagonism.

CUSTOMER VALIDATION

- Nat Commun. 2023 May 2;14(1):2523.
- Nat Commun. 2022 Jun 13;13(1):3394.
- Int J Obes. 2022 May 20.
- J Funct Foods. 2023 Apr.
- Food Nutr Res. 2021, 65: 7577.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Nisoli E, et al. Functional studies of the first selective beta 3-adrenergic receptor antagonist SR 59230A in rat brown adipocytes. Mol Pharmacol. 1996 Jan;49(1):7-14.
- [2]. Kanzler SA, et al. Involvement of β 3-adrenergic receptors in the control of food intake in rats. Braz J Med Biol Res. 2011 Nov;44(11):1141-7.
- [3]. Bruno G, et al. β 3-adrenoreceptor blockade reduces tumor growth and increases neuronal differentiation in neuroblastoma via SK2/S1P2 modulation. Oncogene. 2020 Jan;39(2):368-384.
- [4]. Bexis S, et al. Role of alpha 1- and beta 3-adrenoceptors in the modulation by SR59230A of the effects of MDMA on body temperature in the mouse. Br J Pharmacol. 2009 Sep;158(1):259-66.

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