



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) 

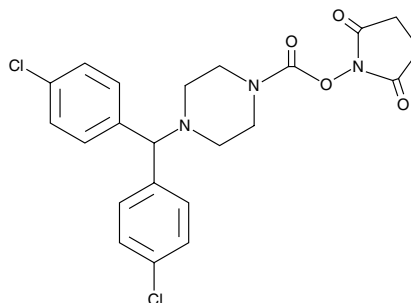
Product Information



MJN110

Item No. 17583

CAS Registry No.: 1438416-21-7
Formal Name: 4-[bis(4-chlorophenyl)methyl]-1-piperazinecarboxylic acid, 2,5-dioxo-1-pyrrolidinyl ester
Synonym: 2,5-Dioxopyrrolidin-1-yl 4-[bis(4-chlorophenyl)methyl]piperazine-1-carboxylate
MF: C₂₂H₂₁Cl₂N₃O₄
FW: 462.3
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 234 nm



Laboratory Procedures

For long term storage, we suggest that MJN110 be stored as supplied at -20°C. It should be stable for at least two years. MJN110 is supplied as a crystalline solid. A stock solution may be made by dissolving the MJN110 in the solvent of choice. MJN110 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of MJN110 in these solvents is approximately 0.25, 30, and 25 mg/ml, respectively.

MJN110 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Endocannabinoids such as 2-arachidonoyl glycerol (2-AG; Item No. 62160) and arachidonoyl ethanolamide (AEA; Item No. 90050) are biologically active lipids that are involved in a number of synaptic processes including activation of cannabinoid receptors. Monoacylglycerol lipase (MAGL) is a serine hydrolase responsible for the hydrolysis of 2-AG to arachidonic acid (Item No. 90010) and glycerol, thus terminating its biological function. MJN110 is an N-hydroxysuccinimidyl carbamate that inhibits MAGL (IC₅₀ = 9.1 nM) and to a lesser extent ABHD6 with potent selectivity over FAAH (IC₅₀ > 10 μM) and other brain serine hydrolases.¹ It can inhibit 2-AG hydrolysis (IC₅₀ = 2.1 nM) with no effect on AEA hydrolysis up to 50 μM.¹ At 5 mg/kg, MJN110 has been shown to alleviate mechanical allodynia in a rat model of diabetic neuropathy.¹

Reference

1. Niphakis, M.J., Coggnetta, A.B.I., Chang, J.W., *et al.* Evaluation of NHS carbamates as a potent and selective class of endocannabinoid hydrolase inhibitors. *ACS Chem. Neurosci.* **4**, 1322-1332 (2013).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/17583

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 05/07/2015

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com