



# 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) 

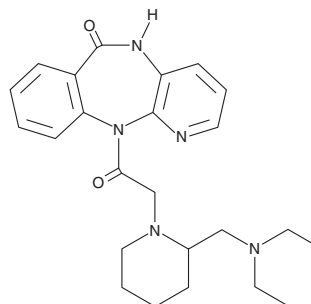
# PRODUCT INFORMATION



## AF-DX 116

Item No. 30871

**CAS Registry No.:** 102394-31-0  
**Formal Name:** 11-[2-[2-[(diethylamino)methyl]-1-piperidinyl]acetyl]-5,11-dihydro-6H-pyrido[2,3-b][1,4]benzodiazepin-6-one  
**MF:** C<sub>24</sub>H<sub>31</sub>N<sub>5</sub>O<sub>2</sub>  
**FW:** 421.5  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

AF-DX 116 is supplied as a solid. A stock solution may be made by dissolving the AF-DX 116 in the solvent of choice, which should be purged with an inert gas. AF-DX 116 is soluble in the organic solvent DMSO at a concentration of approximately 25 mM.

### Description

AF-DX 116 is an antagonist of M<sub>2</sub> muscarinic acetylcholine receptors (K<sub>i</sub> = 0.2 μM).<sup>1</sup> It is selective for cardiac M<sub>2</sub> over salivary gland M<sub>3</sub> receptors (K<sub>i</sub> = 5.01 μM) but also binds sympathetic ganglia M<sub>1</sub> receptors (K<sub>i</sub> = 0.81 μM). AF-DX 116 (0.1 μM) increases vagus nerve stimulation-induced increases in perfusion pressure by 50% in isolated perfused rat hearts.<sup>2</sup> It increases systolic blood pressure and heart rate in a rat model of hypotension induced by repeated cold stress when administered intravenously at doses of 50, 100, and 200 μg/kg.<sup>3</sup>

### References

1. Doods, H.N., Mathy, M.-J., Davidesko, D., *et al.* Selectivity of muscarinic antagonists in radioligand and *in vivo* experiments for the putative M<sub>1</sub>, M<sub>2</sub> and M<sub>3</sub> receptors. *J. Pharmacol. Exp. Ther.* **242(1)**, 257-262 (1987).
2. Bogнар, I.T., Beinhauer, B., Kann, P., *et al.* Different muscarinic receptors mediate autoinhibition of acetylcholine release and vagally-induced vasoconstriction in the rat isolated perfused heart. *Naunyn Schmiedebergs Arch. Pharmacol.* **341(4)**, 279-287 (1990).
3. Hata, T., Itoh, E., Funakami, Y., *et al.* Blood pressure and heart rate are increased by AF-DX 116, a selective M<sub>2</sub> antagonist, in autonomic imbalanced and hypotensive rats caused by repeated cold stress. *Jpn. J. Pharmacol.* **85(3)**, 313-321 (2001).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 07/24/2020

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM