



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) 

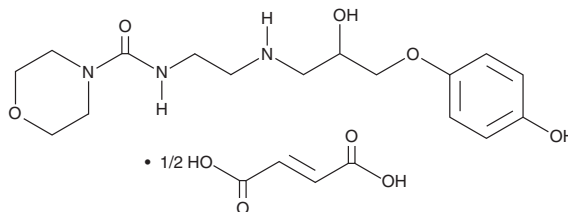
PRODUCT INFORMATION



Xamoterol (hemifumarate)

Item No. 24267

CAS Registry No.: 73210-73-8
Formal Name: N-[2-[[[2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]-4-morpholinecarboxamide, (E)-2-butenedioate (2:1)
Synonym: ICI 118587
MF: C₁₆H₂₅N₃O₅ • 1/2C₄H₄O₄
FW: 397.4
Purity: ≥98%
UV/Vis.: λ_{max}: 289 nm
Supplied as: A crystalline 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

Xamoterol (hemifumarate) is supplied as a crystalline solid. A stock solution may be made by dissolving the xamoterol (hemifumarate) in the solvent of choice. Xamoterol (hemifumarate) is soluble in the organic solvent DMSO, which should be purged with an inert gas. It is also soluble in water. The solubility of xamoterol (hemifumarate) in DMSO and water is approximately 100 and 50 mM, respectively. We do not recommend storing the aqueous solution for more than one day.

Description

Xamoterol is a partial agonist of β_1 -adrenergic receptors (β_1 -ARs) with an EC₅₀ value of 80 nM for the generation of cyclic AMP (cAMP) in neonatal rat cardiomyocyte cultures.¹ It increases spontaneous contraction of isolated rat right atria (EC₅₀ = 4.67 nM).² *In vivo*, xamoterol increases heart rate in beagle dogs (ED₅₀ = 3.2 µg/kg) and in a rat model of spontaneous heart failure (ED₅₀ = 6 µg/kg), an effect that is reversed by the selective β_1 -AR antagonist betaxolol (Item No. 18625) but not the selective β_2 -AR antagonist ICI 118551 (Item No. 15591).^{1,3} Formulations containing xamoterol have been used in the treatment of heart failure.

References

1. Willette, R.N., Aiyar, N., T.-L., Y., *et al.* *In vitro* and *in vivo* characterization of intrinsic sympathomimetic activity in normal and heart failure rats. *J. Pharmacol. Exp. Ther.* **289**(1), 48-53 (1999).
2. Kowalski, M.T., Haworth, D., Lu, X., *et al.* Comparison of the effects of xamoterol and isoprenaline on rat cardiac β -adrenoceptors: Studies of function and regulation. *Br. J. Pharmacol.* **99**(1), 27-30 (1990).
3. Nuttall, A. and Snow, H.M. The cardiovascular effects of ICI 118,587: A β_1 -adrenoceptor partial agonist. *Br. J. Pharmacol.* **77**(2), 381-388 (1982).

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, 04/09/2018

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