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

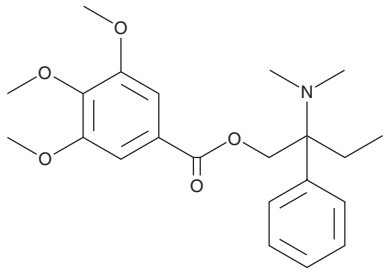
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Trimebutine

Item No. 31574

CAS Registry No.:	39133-31-8
Formal Name:	3,4,5-trimethoxy-benzoic acid, 2-(dimethylamino)-2-phenylbutyl ester
Synonym:	(±)-Trimebutine
MF:	$C_{22}H_{29}NO_5$
FW:	387.5
Purity:	≥98%
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

Trimebutine is supplied as a crystalline solid. A stock solution may be made by dissolving the trimebutine in the solvent of choice, which should be purged with an inert gas. Trimebutine is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of trimebutine in these solvents is approximately 1 and 30 mg/ml, respectively.

Trimebutine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, trimebutine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Trimebutine has a solubility of approximately 0.11 mg/ml in a 1:8 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Trimebutine is an opioid receptor agonist.[1-3] It binds to μ-, δ-, and κ-opioid receptors with K_i values of 0.34, 0.5, and 0.58 μM, respectively, in canine myenteric plexus synaptosomes.[2] Trimebutine inhibits twitch contraction and acetylcholine (ACh) release induced by low-frequency electrical stimulation in isolated guinea pig longitudinal muscle with myenteric plexus (LM-MP; EC_{50}s = 0.274 and 0.215 μM, respectively), effects that are inhibited by the opioid receptor antagonists naloxone and MR2266.[3] It increases twitch contraction and ACh release induced by high-frequency electrical stimulation in isolated guinea pig LM-MP when used at concentrations of 1 μM or less, but inhibits these effects at 10 μM or more. Trimebutine (30, 100, and 300 μM) decreases the amplitude and frequency of spontaneous contractions in isolated guinea pig colonic smooth muscle strips.[4] It also inhibits large conductance calcium-activated potassium (BK_{Ca}) and L-type calcium currents in colonic smooth muscle cells in a concentration-dependent manner.

References

1. Delvaux, M. and Wingate, D. Trimebutine: Mechanism of action, effects on gastrointestinal function and clinical results. *J. Int. Med. Res.* **25(5)**, 225-246 (1997).
2. Allescher, H.D., Ahmad, S. and Daniel, E.E. Interaction of trimebutine and Jo-1196 (fedotozine) with opioid receptors in the canine ileum. *J. Pharmacol. Exp. Ther.* **257(2)**, 836-842 (1991).
3. Taniyama, K., Sano, I., Taniyama, S., *et al.* Dual effect of trimebutine on contractility of the guinea pig ileum via the opioid receptors. *Gastroenterology* **101(6)**, 1579-1587 (1991).
4. Tan, W., Zhang, H., Luo, H.-S., *et al.* Effects of trimebutine maleate on colonic motility through Ca^{2+}-activated K^+ channels and L-type Ca^{2+} channels. *Arch. Pharm. Res.* **34(6)**, 979-985 (2011).

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, 11/24/2020

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