



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) 

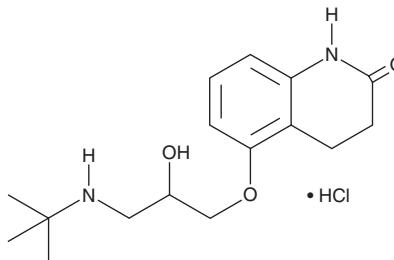
PRODUCT INFORMATION



Carteolol (hydrochloride)

Item No. 23758

CAS Registry No.: 51781-21-6
Formal Name: 5-[3-[(1,1-dimethylethyl)amino]-2-hydroxypropoxy]-3,4-dihydro-2(1H)-quinolinone, monohydrochloride
Synonyms: NSC 300906, OPC 1085
MF: $C_{16}H_{24}N_2O_3 \cdot HCl$
FW: 328.8
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 217, 251 nm
Supplied as: A crystalline solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



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

Laboratory Procedures

Carteolol (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the carteolol (hydrochloride) in the solvent of choice. Carteolol (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of carteolol (hydrochloride) in these solvents is approximately 11, 16, and 14 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of carteolol (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of carteolol (hydrochloride) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Carteolol is an antagonist of β -adrenergic receptors ($K_d = 13$ nM).^{1,2} It blocks isoproterenol-induced increases in heart rate, contractile force, and blood pressure in vagotomized dogs (ED_{50} s = 2.3, 3.1, and 1.8 $\mu g/kg$, respectively).³ The (R) and (S)-enantiomers of carteolol reduce intraocular pressure to similar levels in rabbits when applied topically as a 1% solution.⁴ Formulations containing carteolol have been used in the treatment of open-angle glaucoma.

References

1. Takayanagi, I., Ogishima, M., Koike, K., *et al.* Dose difference in beta-adrenergic blockers with intrinsic sympathomimetic action to block beta-adrenoceptors and induce sympathomimetic action. *Gen. Pharmacol.* **20**(4), 417-419 (1989).
2. Gwathmey, J.K., Kim, C.S., Haijar, R.J., *et al.* Cellular and molecular remodeling in a heart failure model treated with the β -blocker carteolol. *Am. J. Physiol.* **276**(5 Pt. 2), H1678-H1690 (1999).
3. Yabuuchi, Y. and Kinoshita, D. Cardiovascular studies of 5-(3-tert-butylamino-2-hydroxy)propoxy-3,4-dihydrocarbostyryl hydrochloride (OPC-1085), a new potent β -adrenergic blocking agent. *Jpn. J. Pharmacol.* **24**(6), 853-861 (1974).
4. Takayanagi, I., Haiwara, H., Koike, K., *et al.* Effects of the R(+)- and S(-)-isomers of β -adrenoceptor blockers with intrinsic sympathomimetic activity, befunolol and carteolol, on rabbit intraocular pressure. *Can. J. Physiol. Pharmacol.* **69**(8), 1243-1245 (1991).

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, 12/09/2022

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