



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



Batefenterol

Item No. 21793

CAS Registry No.: 743461-65-6
Formal Name: N-[1,1'-biphenyl]-2-yl-carbamic acid, 1-[3-[[2-chloro-4-[[[(2R)-2-(1,2-dihydro-8-hydroxy-2-oxo-5-quinolinyl)-2-hydroxyethyl]amino]methyl]-5-methoxyphenyl]amino]-3-oxopropyl]-4-piperidinyl ester

Synonyms: GSK961081, TD-5959

MF: C₄₀H₄₂ClN₅O₇

FW: 740.2

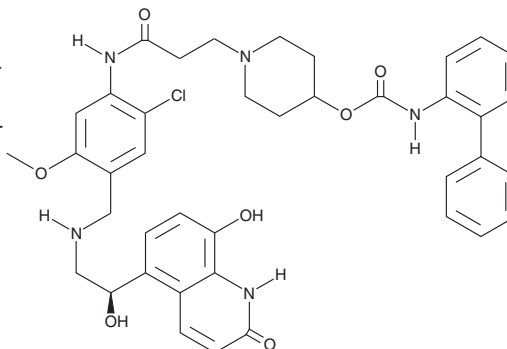
Purity: ≥98%

UV/Vis.: λ_{max}: 254, 293 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

Batefenterol is supplied as a crystalline solid. A stock solution may be made by dissolving the batefenterol in the solvent of choice. Batefenterol is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of batefenterol in these solvents is approximately 0.5 and 1 mg/ml, respectively.

Batefenterol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, batefenterol should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Batefenterol has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Batefenterol is a muscarinic antagonist and β_2 -adrenergic receptor (β_2 -AR) agonist ($K_s = 1.4, 1.3, \text{ and } 3.7 \text{ nM}$, for $hM_2, hM_3, \text{ and } h\beta_2\text{-AR}$, respectively in a radioligand binding assay).^{1,2} Batefenterol exhibits potent $h\beta_2\text{-AR}$ agonist activity ($EC_{50} = 0.29 \text{ nM}$) with 440- and 320-fold functional selectivity over $h\beta_1\text{-}$ and $h\beta_3\text{-ARs}$, respectively.¹ Batefenterol induces smooth muscle relaxation ($EC_{50} = 11 \text{ nM}$) in isolated guinea pig tracheal tissue and inhibits bronchoconstrictor response in a guinea pig bronchoprotection assay ($ED_{50} = 6.4 \mu\text{g/ml}$).¹ Formulations containing batefenterol are in clinical trials to treat chronic obstructive pulmonary disease (COPD).³

References

1. Hedge, S.S., Hughes, A.D., Chen, Y., et al. *J. Pharmacol. Exp. Ther.* **351(1)**, 190-199 (2014).
2. Hughes, A.D., Chen, Y., Hegde, S.S., et al. *J. Med. Chem.* **58(6)**, 2609-2622 (2015).
3. Wielders, P.L.M.L., Ludwig-Sengpiel, A., Locantore, N., et al. *Eur. Respir.* **42(4)**, 972-981 (2013).

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, 08/08/2017

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