

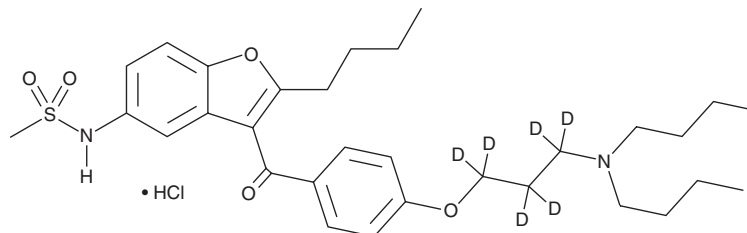
PRODUCT INFORMATION



Dronedarone-d₆ (hydrochloride)

Item No. 31787

CAS Registry No.: 1329809-23-5
Formal Name: N-[2-butyl-3-[4-[3-(dibutylamino)propoxy]-1,1,2,2,3,3-d₆]benzoyl]-5-benzofuranyl]-methanesulfonamide, monohydrochloride
MF: C₃₁H₃₈D₆N₂O₅S • HCl
FW: 599.3
Chemical Purity: ≥95% (Dronedarone)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Dronedarone-d₆ is intended for use as an internal standard for the quantification of dronedarone (Item No. 9000543) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Dronedarone-d₆ is supplied as a solid. A stock solution may be made by dissolving the dronedarone-d₆ in the solvent of choice, which should be purged with an inert gas. Dronedarone-d₆ is slightly soluble in chloroform and methanol.

Description

Dronedarone is an antiarrhythmic agent and a derivative of amiodarone (Item No. 15213).^{1,2} It inhibits muscarinic acetylcholine receptor-dependent potassium currents induced by carbachol (carbamoylcholine; Item No. 14486) or intracellular loading of GTPγS in single cells isolated from guinea pig atria (IC₅₀s = 0.1 and 1 μM, respectively).² Dronedarone (50 and 100 mg/kg) reduces sinus frequency and prolongs action potential duration (APD) in isolated rabbit ventricular myocardium. It increases atrial APD and the atrial effective refractory period (AERP) in a dog model of atrial fibrillation induced by rapid right atrial pacing.³ Formulations containing dronedarone have been used in the treatment of atrial fibrillation.

References

1. Sun, W., Sarma, J.S., and Singh, B.N. Electrophysiological effects of dronedarone (SR33589), a noniodinated benzofuran derivative, in the rabbit heart: Comparison with amiodarone. *Circulation* **100(22)**, 2276-2281 (1999).
2. Guillemare, E., Marion, A., Nisato, D., et al. Inhibitory effects of dronedarone on muscarinic K⁺ current in guinea pig atrial cells. *J. Cardiovasc. Pharmacol.* **36(6)**, 802-805 (2000).
3. Saengklub, N., Limprasutr, V., Sawangkoon, S., et al. Dronedarone attenuates the duration of atrial fibrillation in a dog model of sustained atrial fibrillation. *Exp. Anim.* **66(3)**, 251-258 (2017).

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, 11/23/2022

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