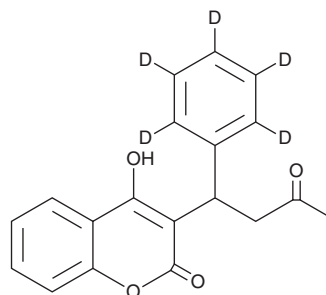


PRODUCT INFORMATION



(±)-Warfarin-d₅ Item No. 25432

CAS Registry No.: 75472-93-4
Formal Name: 4-hydroxy-3-[3-oxo-1-(phenyl-d₅)butyl]-2H-1-benzopyran-2-one
MF: C₁₉H₁₁D₅O₄
FW: 313.4
Chemical Purity: ≥98% ((±)-warfarin)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀
Supplied as: A 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

(±)-Warfarin-d₅ is intended for use as an internal standard for the quantification of warfarin 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).

(±)-Warfarin-d₅ is supplied as a solid. A stock solution may be made by dissolving the (±)-warfarin-d₅ in the solvent of choice. (±)-Warfarin-d₅ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of (±)-warfarin-d₅ in ethanol is approximately 5 mg/ml and approximately 25 mg/ml in DMSO and DMF.

Description

(±)-Warfarin (Item No. 13566) is a vitamin K antagonist, a coumarin derivative, and a racemic mixture of (+)-warfarin (Item No. 13526) and (-)-warfarin (Item No. 13531).^{1,2} It is an anticoagulant that interferes with the interconversion of vitamin K and vitamin K epoxide and the role of vitamin K in carboxylation of several clotting cascade proteins, inhibiting the initiation of clotting.¹ Formulations containing warfarin have been used to treat and prevent blood clots in atrial fibrillation, heart valve replacement, venous thrombosis, and pulmonary embolism.

References

1. Hirsh, J., Fuster, V., Ansell, J., et al. American heart association/american college of cardiology foundation guide to warfarin therapy. *J. Am. Coll. Cardiol.* **41(9)**, 1633-1652 (2003).
2. Ufer, M. Comparative pharmacokinetics of vitamin K antagonists warfarin, phenprocoumon and acenocoumarol. *Clin. Pharmacokinet.* **44(12)**, 1227-1246 (2005).

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

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