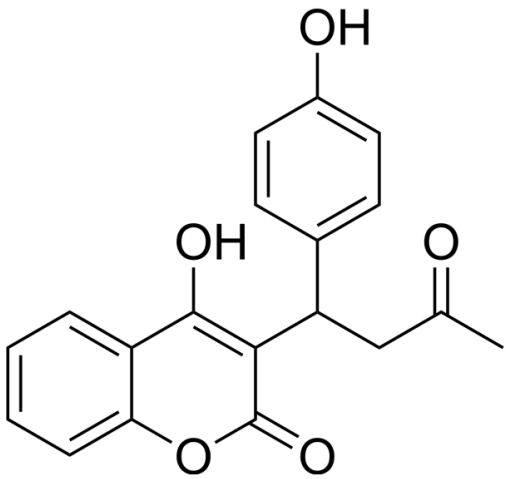
# Product Data Sheet

Product Name: 4'-Hydroxywarfarin
Cat. No.: GC79588

## Chemical Properties

| | | | |
|---|---|---|---|
| Cas. No. | 24579-14-4 | | |
| Formula | $C_{19}H_{16}O_5$ | M.Wt | 324.33 |
| Solubility | | Storage | Store at -20°C |
| General tips | For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months. | | |
| Shipping Condition | Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request. | | |

Structure




## Background

4′-Hydroxywarfarin is a regioisomeric phenolic derivative of Warfarin. 4′-Hydroxywarfarin is a major metabolite of Warfarin in mammals and serves as a metabolic probe for the diversity of cytochrome P-450 isoenzymes [1] [2].

In Vitro, 4′-Hydroxywarfarin (compound W4) (10 mM) undergoes concentration-dependent upward pKa shifts when complexed with neutral β-Cyclodextrin [1]. 4′-Hydroxywarfarin (0.5 mg/mL; 6 d) is

produced via biotransformation of Warfarin by Cunninghamella bainieri (UI-3065) cell suspension cultures, yielding 2 mg of pure metabolite[2]. 4′-Hydroxywarfarin (12.5 mg per flask; 12-48 h) is produced from 4′-deuterowarfarin by Cunninghamella bainieri (UI-3065) cell suspension cultures with an average 80% deuterium migration and retention[2].

References:

[1]. Nowak, Paweł M, et al. Modulation of pK a by cyclodextrins; subtle structural changes induce spectacularly different behaviors. RSC Adv., 5(95), 77545–77552.
[2]. Rizzo JD, et al. Microbial models of mammalian metabolism: conversion of warfarin to 4'-hydroxywarfarin using Cunninghamella bainieri. Journal of pharmaceutical sciences. 1989 Mar;78(3):183-9.