

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

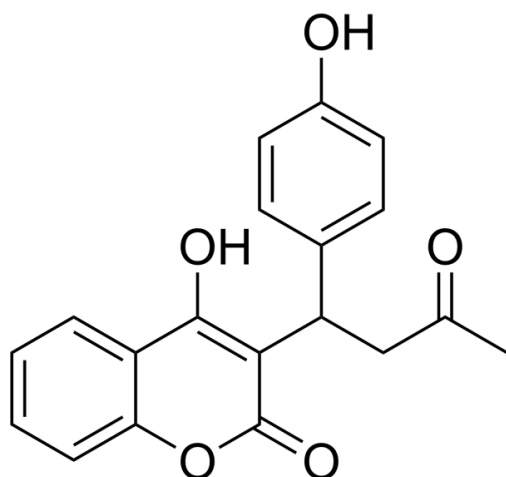
Solubility

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

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA