Phone: 888-558-5227

651-644-8424

888-558-7329 Fax: Email: getinfo@lktlabs.com

Web: lktlabs.com

## **Product Information**

Product ID W0272

CAS No. 5543-57-7

**Chemical Name** 

Synonym (-)-Warfarin

Formula C<sub>19</sub>H<sub>16</sub>O<sub>4</sub> Formula Wt. 308.33

**Melting Point** 

Purity ≥99%

Solubility The solubility of (+)-warfarin in ethanol is approximately 5 mg/ml and

approximately 25 mg/ml in DMSO and DMF

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## **Pricing and Availability**

Bulk quanitites available upon request

Product ID	Size	List Price
W0272	1 mg	\$145.80
W0272	5 mg	\$583.50
W0272	25 mg	\$1847.50

Store Temp 4°C Ship Temp Ambient

**Description** Warfarin is an orally available antithrombotic commonly used for preventing blood clot formation and migration. The S enantiomer of warfarin is somewhat more potent than the R enantiomer. This coumarin inhibits the subunit 1 of the vitamin K epoxide reductase complex (VKORC1), depleting the reduced form of vitamin K (KH2) and inhibiting the formation of coagulation factors II, VII, IX, and X. Warfarin has a relatively slow onset and requires 1 to 2 days to take effect. This compound is highly sensitive to a wide variety of genetic polymorphisms and is metabolized by cytochrome P4502C9; it also interacts with many other medications and foods, requiring diligent activity monitoring.

References Hall AM, Wilkins MR. Warfarin: a case history in pharmacogenetics. Heart. 2005 May;91(5):563-4. PMID: 15831631.

Tabrizi AR, Zehnbauer BA, Borecki IB, et al. The frequency and effects of cytochrome P450 (CYP) 2C9 polymorphisms in patients receiving warfarin. J Am Coll Surg. 2002 Mar;194(3):267-73. PMID: 11893129.

Freedman MD. Oral anticoagulants: pharmacodynamics, clinical indications and adverse effects. J Clin Pharmacol. 1992 Mar;32 (3):196-209. PMID:1564123.

Wallin R, Martin LF. Vitamin K-dependent carboxylation and vitamin K metabolism in liver. Effects of warfarin. J Clin Invest. 1985 Nov:76(5):1879-84. PMID: 3932474.

Suttie JW. Mechanism of action of vitamin K: demonstration of a liver precursor of prothrombin. Science. 1973 Jan 12;179 (4069):192-4. PMID: 4682251.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.