

Data Sheet (Cat.No.TN1551)

Danshenxinkun B

Chemical Properties

CAS No.: 65907-76-8 Formula: C18H16O3

Molecular Weight: 280.3

Appearance: N/A

Storage: $0-4^{\circ}\text{C}$ for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Danshenxinkun B has antioxldant activity, it may have the potential of being used as natural antioxidants in foods and cosmetics.
Targets(IC ₅₀)	others: None
In vitro	Rhizomes of tanshen (Salvia miltiorrhiza Bung) were pulverized and extracted with diethyl ether. The extract was washed with 5% sodium carbonate solution, freed of solvents, and applied to a silica gel column. Seven colorful bands ranging from light yellow to dark brown were resolved and collected. After certain purification procedures, such as stepwise recrystallization and preparative TLC, seven crystalline quinone-type compounds were obtained, namely tanshinone I, dihydrotanshinone I, tanshinone IIA, tanshinone IIB, methylenetanshinquinone, cryptotanshinone, and Danshenxinkun B, all of which had color. Confirmation of the identifications was carried out by mass spectroscopy and infrared spectrometry. Measurement of the antioxidant activity in lard of these quinones was performed with two methods, the Rancimat method and the Shaal oven method in conjunction with peroxide value determination. Except for tanshinone IIA, all the quinones exhibited antioxidant activities, of which dihydrotanshinone I, tanshinone I, methylenetanshinquinone, and cryptotanshinone showed strong activities comparable to that of BHA and BHT.

Solubility Information

uct slightly soluble or insoluble	Solubility
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.568 mL	17.838 mL	35.676 mL
5 mM	0.714 mL	3.568 mL	7.135 mL
10 mM	0.357 mL	1.784 mL	3.568 mL
50 mM	0.071 mL	0.357 mL	0.714 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Antioxidative components of tanshen (Salvia miltiorrhiza Bung). J. Agr. Food Chem., 1990, 38(5):1194-7

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