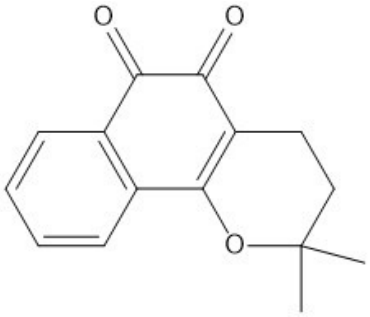
Tribioscience

ß-Lapachone, Topoisomerase I inhibitor

Catalog	Unit
TBI2386-5MG	5 mg
TBI2386-25MG	25 mg

Product Details



Formal Name: 3,4-dihydro-2,2-dimethyl-2H-naphtho[1,2-b]pyran-5,6-dione
Alternate Names: NSC 26326
Molecular Formula: $C_{15}H_{14}O_3$
Formula Weight: 242.27
CAS Number: 4707-32-8
Purity: >98%
Formulation: powder
Solubility: Soluble in DMSO (up to 35 mg/ml) or in Ethanol (up to 15 mg/ml)
Storage: -20°C
Stability: ≥ 2 years.

Applications

Topoisomerase I inhibitor

Functions

A naturally occurring quinone found in the bark of the Lapacho tree (Tabebuia avellanedae). A novel DNA topoisomerase I inhibitor which unlike camptothecin does not stabilize the cleavable complex indicating a novel mode of action. Induces apoptosis in a number of cancer cell lines. In cancer cells overexpressing NAD(P)H:quinone oxidoreductase, reduction of β-lapachone leads to futile cycling between quinone and hydroquinone forms resulting in the production of reactive oxygen species. Suppresses radiation-induced activation of NFκB.

Application Procedures

First dissolved in DMSO (up to 35 mg/ml) or in Ethanol (up to 15 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

For research use only.

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