Data Sheet (Cat.No.TN1642)

TargetMol

Ferruginol

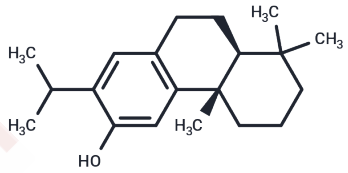
Chemical Properties

CAS No. : 514-62-5

Formula: C20H30O

Molecular Weight: 286.459

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

Description	Ferruginol has anti-plasmodial, leishmanicidal, anti-ulcerogenic, cardioprotective, anticancer, anti-oxidative and anti-inflammatory activities, it can induce apoptosis in non-small cell lung cancer (NSCLC) cells.
Targets(IC50)	Apoptosis,Bcl-2 Family,Caspase,Antifection,HSV,PARP
In vitro	The radial accumulation pattern of Ferruginol was examined from sapwood and through the intermediate wood to the heartwood by direct mapping using time-of-flight secondary ion mass spectrometry (TOF-SIMS). The data were compared with quantitative results obtained from a novel method of gas chromatography analysis using laser microdissection sampling and with water distribution obtained from cryo-scanning electron microscopy. Ferruginol initially accumulated in the middle of the intermediate wood, in the earlywood near the annual ring boundary. It accumulated throughout the entire earlywood in the inner intermediate wood, and in both the earlywood and the latewood in the heartwood. The process of Ferruginol accumulation continued for more than eight annual rings. Ferruginol concentration peaked at the border between the intermediate wood and heartwood, while the concentration was less in the latewood compared with the earlywood in each annual ring. Ferruginol tended to accumulate around the ray parenchyma cells. In addition, at the border between the intermediate wood and heartwood, the accumulation was higher in areas without water than in areas with water[1]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4909 mL	17.4544 mL	34.9089 mL
5 mM	0.6982 mL	3.4909 mL	6.9818 mL
10 mM	0.3491 mL	1.7454 mL	3.4909 mL
50 mM	0.0698 mL	0.3491 mL	0.6982 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

The accumulation pattern of ferruginol in the heartwood-forming Cryptomeria japonica xylem as determined by time-of-flight secondary ion mass spectrometry and quantity analysis.Ann Bot. 2014 May;113(6):1029-36.