

## Ledol

## Chemical Properties

CAS No. : 577-27-5

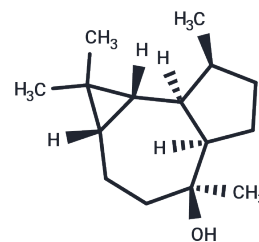
Formula: C<sub>15</sub>H<sub>26</sub>O

Molecular Weight: 222.37

Storage: Store at low temperature, Keep away from direct sunlight

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	Ledol ((+)-Ledol) is a naturally occurring sesquiterpene with potential biological activities such as antioxidant, anti-inflammatory, xanthine oxidase inhibition and uric acid reduction.
Targets(IC50)	Antioxidant, Antifungal, Xanthine Oxidase

## Solubility Information

Solubility	DMF: 80 mg/mL (359.76 mM), Sonication is recommended. DMSO: 8 mg/mL (35.98 mM), Sonication is recommended. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.497 mL	22.485 mL	44.9701 mL
5 mM	0.8994 mL	4.497 mL	8.994 mL
10 mM	0.4497 mL	2.2485 mL	4.497 mL
50 mM	0.0899 mL	0.4497 mL	0.8994 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

Jesionek A, Poblocka-Olech L, Zabiegala B, Bucinski A, Krauze-Baranowska M, Luczkiewicz M. Validated HPTLC method for determination of ledol and alloaromadendrene in the essential oil fractions of *Rhododendron tomentosum* plants and in vitro cultures and bioautography for their activity screening. *J Chromatogr B Analyt Technol Biomed Life Sci.* 2018 Jun 1;1086:63-72. doi: 10.1016/j.jchromb.2018.04.006. Epub 2018 Apr 7. PubMed PMID: 29656085.

Hong YJ, Tantillo DJ. Is a 1,4-Alkyl Shift Involved in the Biosynthesis of Ledol and Viridiflorol? *J Org Chem.* 2017 Apr 7;82(7):3957-3959. doi: 10.1021/acs.joc.7b00187. Epub 2017 Mar 15. PubMed PMID: 28277661.

Thamapipol S, Kündig EP. Intramolecular Diels-Alder reactions using chiral ruthenium Lewis acids and application in the total synthesis of ent-ledol. *Org Biomol Chem.* 2011 Nov 7;9(21):7564-70. doi: 10.1039/c1ob06121f. Epub 2011 Sep 22. PubMed PMID: 21938305.

Raal A, Orav A, Gretchushnikova T. Composition of the essential oil of the *Rhododendron tomentosum* Harmaja from Estonia. *Nat Prod Res.* 2014;28(14):1091-8. doi: 10.1080/14786419.2014.907287. Epub 2014 Apr 9. PubMed PMID: 24716612.

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