

Totarol

Chemical Properties

CAS No. : 511-15-9

Formula: C₂₀H₃₀O

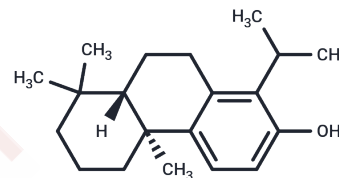
Molecular Weight: 286.45

Keep away from direct sunlight, Keep away from moisture

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	Totarol ((+)-Totarol) shows antibacterial effects against several pathogenic Gram-positive bacteria, mycobacterium tuberculosis.
Targets(IC50)	Antibacterial, Antifection
In vitro	Totarol (2 μM) inhibits the proliferation of Bacillus subtilis cells and strongly induces the filamentation in B. subtilis cells. Totarol (1.5 μM) reduces the frequency of the Z-ring occurrence per micrometer of the bacterial cell length but did not affect the nucleoid frequency, suggesting that it blocks cytokinesis by inhibiting the formation of the Z-ring. Totarol perturbs the assembly dynamics of FtsZ protofilaments in the Z-ring[1].

Solubility Information

Solubility	DMSO: 55 mg/mL (192.01 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 5 mg/mL (17.46 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.491 mL	17.4551 mL	34.9101 mL
5 mM	0.6982 mL	3.491 mL	6.982 mL
10 mM	0.3491 mL	1.7455 mL	3.491 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

Jaiswal R, et al. Totarol inhibits bacterial cytokinesis by perturbing the assembly dynamics of FtsZ. *Biochemistry*. 2007 Apr 10;46(14):4211-20.

Bernabeu A, et al. A MAS-NMR study of the location of (+)-totarol, a diterpenoid bioactive molecule, in phospholipid model membranes. *Chem Phys Lipids*. 2002;119(1-2):33-39.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481