

Sanguisorbigenin

Chemical Properties

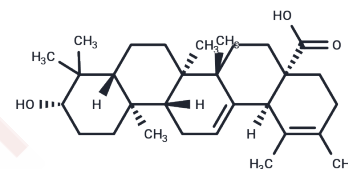
CAS No. : 6812-98-2

Formula: C₃₀H₄₆O₃

Molecular Weight: 454.69

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	Sanguisorbigenin (Tomentosolic acid) is a natural antimicrobial agent that inhibits methicillin-resistant Staphylococcus aureus (MRSA).
Targets(IC50)	Antibacterial
In vitro	Treatment of Sanguisorbigenin with sub-MIC concentrations (1.56-6.25 µg/mL) significantly inhibited the expression of bla _{R1} , mecA, and bla _Z in MRSA dose-dependently. The gene expression of mecA is remarkably reduced after the treatment of Sanguisorbigenin. The minimal inhibitory concentration values of Sanguisorbigenin against six strains of S. aureus are in the range of 12.5-50 µg/mL[1]. Sanguisorbigenin has a potent antibacterial effect and could effectively reverse the sense of antibiotics by inhibiting the mecA expression and decreasing PBP2a expression[1].

Solubility Information

Solubility	DMSO: 60 mg/mL (131.96 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 1.67 mg/mL (3.67 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	2.1993 mL	10.9965 mL	21.993 mL
5 mM	0.4399 mL	2.1993 mL	4.3986 mL
10 mM	0.2199 mL	1.0997 mL	2.1993 mL
50 mM	0.044 mL	0.2199 mL	0.4399 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

S Wang, et al. Antibacterial activity and synergy of antibiotics with sanguisorbigenin isolated from *Sanguisorba officinalis* L. against methicillin-resistant *Staphylococcus aureus*. *Lett Appl Microbiol.* 2021 Mar;72(3):238-244.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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