

Chalepensin

Chemical Properties

CAS No. : 13164-03-9

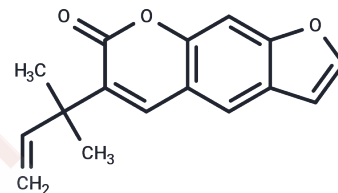
Formula: C₁₆H₁₄O₃

Molecular Weight: 254.28

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	Chalepensin, a furanocoumarin isolated from the rutaceae plant <i>Ruta chalepensis</i> L., is a selective CYP2A6 inhibitor, inhibiting CYP1A1, CYP1A2, CYP2A13, CYP2C9, CYP2D6, CYP2E1, and CYP3A4. Chalepensin exhibits Chalepensin j has antiprotozoal activity and inhibits methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) with MIC values in the range of 32-128 µg/mL.
Targets(IC50)	Antibacterial, Cytochromes P450
In vitro	Chalepensin (7.8 to 500 µg/ml) causes significant ($p < 0.05$) 53 to 76% and 50 to 71% <i>S. mutans</i> growth inhibition in liquid and solid media, respectively, with MICs of less than 7.8 µg/ml. Chalepensin possesses antimicrobial activity against <i>S. mutans</i> . [3]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9327 mL	19.6634 mL	39.3267 mL
5 mM	0.7865 mL	3.9327 mL	7.8653 mL
10 mM	0.3933 mL	1.9663 mL	3.9327 mL
50 mM	0.0787 mL	0.3933 mL	0.7865 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

Antiprotozoal activity against *Entamoeba histolytica* of plants used in northeast Mexican traditional medicine. Bioactive compounds from *Lippia graveolens* and *Ruta chalepensis*. *Molecules*. 2014 Dec 15;19(12):21044-65.

Allelochemicals from *Stauranthus perforatus*, a Rutaceous tree of the Yucatan Peninsula, Mexico. *Phytochemistry*. 2005 Feb;66(4):487-94.

Gomez-Flores R, et al. Antimicrobial effect of chalepensis against *Streptococcus mutans*. *Journal of Medicinal Plants Research*. 2016, 10(36): 631-634.

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