Data Sheet (Cat.No.TN8331)

TargetMol

Glycozolidal

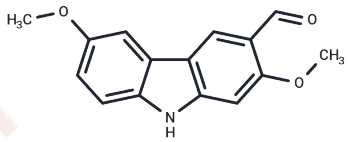
Chemical Properties

CAS No. : 51971-09-6

Formula: C15H13NO3

Molecular Weight: 255.27

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	Glycozolidal is a carbazole alkaloid isolated from the leaves or stems of Clausena lansium (Lour.) Skeels. It exhibits potent antibacterial activity against Porphyromonas gingivalis, a keystone pathogen involved in the pathogenesis of chronic periodontitis. In vitro studies have also characterized its cytotoxic profile, with IC50 values of 120.86 μg/mL against human gingival fibroblasts (HGFs) and 97.74 μg/mL against U937 monocytes. This bioactive secondary metabolite serves as a significant scaffold for exploring novel antimicrobial agents targeting oral infections and studying the structure-activity relationships of carbazole derivatives.
Targets(IC50)	Antibacterial
In vitro	Glycozolidal effectively inhibits the periodontal pathogen Porphyromonas gingivalis. It shows IC50 values of 120.86 μg/mL (HGFs) and 97.74 μg/mL (U937 monocytes), establishing a preliminary safety window for potential topical oral applications [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (313.39 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9174 mL	19.5871 mL	39.1742 mL
5 mM	0.7835 mL	3.9174 mL	7.8348 mL
10 mM	0.3917 mL	1.9587 mL	3.9174 mL
50 mM	0.0783 mL	0.3917 mL	0.7835 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

Laphookhieo S, et al. In vitro evaluation of the antibacterial and Anti-Inflammation activities of clausena lansium (Lour.) skeels[J]. 2015.