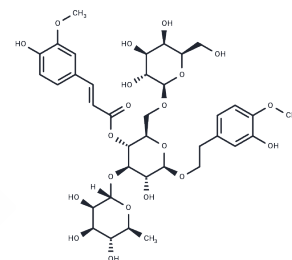


Jionoside B1

Chemical Properties

CAS No. :	120406-37-3
Formula:	C ₃₇ H ₅₀ O ₂₀
Molecular Weight:	814.78
Storage:	Store under nitrogen Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Jionoside B1 is a natural product and an α -glucosidase inhibitor with potential anti-diabetic activity. This compound, isolated from the herb <i>Eriophyton wallichii</i> , exhibits favorable enzyme inhibitory effects and may be used for the development of novel hypoglycemic agents.
Targets(IC50)	Glucosidase
In vitro	Methods: In MDA-MB-231 and 4T1 cells, the synergistic effect of jionoside B1 (10 μ M, 6-24 h) combined with cisplatin (20 μ M) was assessed by CCK-8, flow cytometry, and Western blot. Results: Jionoside B1 reduced the cisplatin IC ₅₀ from 22.86 μ M to 9.17 μ M (MDA-MB-231), significantly increased ROS levels, decreased mitochondrial membrane potential, upregulated Bax, cleaved caspase-3, and PARP, and induced apoptosis.[1]
In vivo	Methods: In a 4T1 orthotopic breast cancer BALB/c mouse model (5 \times 10 ⁶ cells inoculated), mice were randomized after tumors reached 100 mm ³ and received daily intraperitoneal injections of Jionoside B1 (5 mg/kg, dissolved in PBS) combined with cisplatin (2 mg/kg) for 14 consecutive days. Results: Combined administration significantly inhibited tumor growth, reduced tumor weight, increased cleaved PARP expression, and did not exacerbate hepatic or renal toxicity. [1]

Solubility Information

Solubility	DMSO: 240 mg/mL (294.56 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2273 mL	6.1366 mL	12.2733 mL
5 mM	0.2455 mL	1.2273 mL	2.4547 mL
10 mM	0.1227 mL	0.6137 mL	1.2273 mL
50 mM	0.0245 mL	0.1227 mL	0.2455 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

Xu, C, et al. Jionoside B1 Sensitizes TNBC to Cisplatin by Inhibiting SIRT3-Mediated Oxidative Stress Defense. *Biomedicines* 2026, 14, 421.

Thu VK, et al. Iridoid glycosides link with phenylpropanoids from *Rehmannia glutinosa*. *Nat Prod Res.* 2022 Oct;36 (20):5370-5375.

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