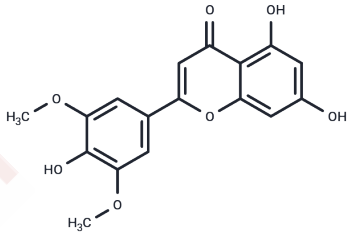
Data Sheet (Cat.No.TN1068)

TargetMol

Tricin

Chemical Properties



CAS No. : 520-32-1

Formula: C17H14O7

Molecular Weight: 330.29

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	Tricin can inhibit human cytomegalovirus (HCMV) replication by inhibiting CDK9. Tricin inhibits the proliferation and invasion of C6 glioma cells via the upregulation of focal-adhesion-finase (FAK)-targeting microRNA-7.
Targets(IC50)	CDK,Virus Protease
In vitro	Methanol extract of Zizania latifolia was partitioned with EtOAc, n-BuOH, and H2O. From the EtOAc layers, a new flavonolignan along with a known flavone and three known flavonolignans, Tricin (1), salcolin A (2), salcolin B (3), and salcolin C (4), were isolated through repeated silica gel and ODS column chromatography. The chemical structure of the new flavonolignan was determined to be Tricin-4'-O-[erythro-β-guaiacyl-(7'-O-methyl)-glyceryl] ether and was named salcolin D (5) based on physicochemical and spectroscopic data, including FT-NMR and ESI-MS. All compounds were isolated for the first time from this plant. Compounds 2-5, Tricin derivatives, all exhibited higher anti-inflammatory and anti-allergy activities than Tricin. In particular, salcolin D (5) was shown to have the strongest inhibitory activity against LPS-induced NO production in RAW 264.7 cells as well as β-hexosaminidase release in IgE-sensitized RBL-2H3 cells[1]

Solubility Information

Solubility	DMSO: 125 mg/mL (378.46 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (12.11 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0276 mL	15.1382 mL	30.2764 mL
5 mM	0.6055 mL	3.0276 mL	6.0553 mL
10 mM	0.3028 mL	1.5138 mL	3.0276 mL
50 mM	0.0606 mL	0.3028 mL	0.6055 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

Tricin derivatives as anti-inflammatory and anti-allergic constituents from the aerial part of Zizania latifolia.Biosci Biotechnol Biochem. 2015 May;79(5):700-6.
Yu R, Zhang Y, Wang T, et al.Effect of Tricin on cardiomyocyte damage caused by diabetic cardiomyopathy (DCM). BMC Cardiovascular Disorders.2024, 24: 668.