

Tamarixetin

Chemical Properties

CAS No. : 603-61-2

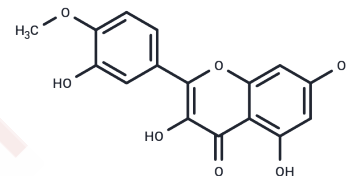
Formula: C₁₆H₁₂O₇

Molecular Weight: 316.26

Keep away from direct sunlight

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	Tamarixetin (4'-O-Methyl Quercetin) is a natural flavonoid derivative of quercetin that exhibits anti-inflammatory and antioxidative effects, offering protection against cardiac hypertrophy.
Targets(IC50)	Apoptosis,Akt,Endogenous Metabolite,Antibacterial,Protease,COX, Immunology/Inflammation related,Interleukin,JNK,p38 MAPK,ROS
In vitro	Tamarixetin reduced the secretion of various inflammatory cytokines by dendritic cells after activation with LPS.?It also promoted the secretion of the anti-inflammatory cytokine interleukin (IL)-10 and specifically increased the population of IL-10-secreting immune cells in LPS-activated splenocytes.?Tamarixetin showed general anti-inflammatory effects in mouse models of bacterial sepsis and decreased bacteria abundance and endotoxin levels.

Solubility Information

Solubility	DMSO: 4.4 mg/mL (13.91 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: 1 mg/mL (3.16 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	3.162 mL	15.8098 mL	31.6196 mL
5 mM	0.6324 mL	3.162 mL	6.3239 mL
10 mM	0.3162 mL	1.581 mL	3.162 mL
50 mM	0.0632 mL	0.3162 mL	0.6324 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

- Jo P H , Jun L S , Joon C , et al. Tamarixetin Exhibits Anti-inflammatory Activity and Prevents Bacterial Sepsis by Increasing IL-10 Production[J]. Journal of Natural Products, 2018, 81:acs.jnatprod.8b00155-.
- Zhang F, Weng N, Zhai J X, et al. Rapid Classification and Identification of Chemical Compounds and Semi-Quantitative Metabolism of Huangkui Capsules and the Protective Effects of Its Quercetin Derivatives against Tacrolimus-induced HK-cell Reduction. World Journal of Traditional Chinese Medicine. 2024: 10.4103.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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