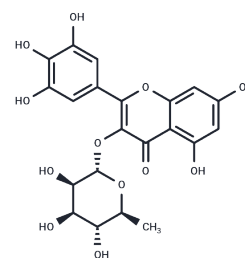


## Myricitrin

## Chemical Properties

CAS No. :	17912-87-7
Formula:	C <sub>21</sub> H <sub>20</sub> O <sub>12</sub>
Molecular Weight:	464.38
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	Myricitrin (Myricitrine), a flavonoid compound isolated from the root bark of <i>Myrica cerifera</i> , exerts antinociceptive effects.
Targets(IC50)	NO Synthase,Parasite,PKC,TNF
In vitro	In mice, Myricitrin (10/30 mg/kg, i.p.) blocks apomorphine-induced stereotypy and climbing behaviors, while also prolonging the hindlimb withdrawal time.
In vivo	In rodent models of chemical and mechanical pain, Flurbiprofen activates protein kinase C $\alpha$ and PKC $\epsilon$ , while Myricitrin blocks this action, thereby exerting a significant analgesic effect. The pain-relief mechanism of Myricitrin is attributed to a decrease in calcium ion influx and the opening of voltage-dependent and small-conductance calcium-activated potassium (K <sup>+</sup> ) channels. Additionally, Myricitrin inhibits the expression of the p53 gene, which leads to the activation of caspase-3 and the MAPK signaling pathway, while altering the expression pattern of anti-apoptotic and pro-apoptotic genes. Consequently, this reduces H <sub>2</sub> O <sub>2</sub> -induced apoptosis in vascular endothelial cells.

## Solubility Information

Solubility	H <sub>2</sub> O: < 1 mg/mL (insoluble), DMSO: 86 mg/mL (185.19 mM),Sonication is recommended. Ethanol: 1 mg/mL (2.15 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 3.3 mg/mL (7.11 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	2.1534 mL	10.767 mL	21.5341 mL
5 mM	0.4307 mL	2.1534 mL	4.3068 mL
10 mM	0.2153 mL	1.0767 mL	2.1534 mL
50 mM	0.0431 mL	0.2153 mL	0.4307 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

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