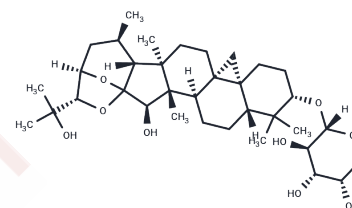


## Cimiracemoside C

## Chemical Properties

CAS No. :	256925-92-5
Formula:	C <sub>35</sub> H <sub>56</sub> O <sub>9</sub>
Molecular Weight:	620.81
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	Cimiracemoside C (Cimicifugoside M) is an active component of Cimicifuga racemosa. It activates AMPK and has the potential activity against diabetes.
Targets(IC50)	AMPK
In vitro	Ze 450 and some of its components (23-epi-26-deoxyactein, protopine and Cimiracemoside C) were investigated in vitro for their effects on AMP-activated protein kinase (AMPK) compared to metformin in HepaRG cells. Ze 450 (given orally (PO) and intraperitoneally (IP)), metformin (PO) and controls were given over 7 days to 68 male ob/ob mice. Glucose and insulin concentrations were measured at baseline and during an oral glucose tolerance test (OGTT). Ze 450 and its components activated AMPK to the same extent as metformin. In mice, Ze 450 (PO/IP) decreased significantly average daily and cumulative weight gain, average daily food and water intake, while metformin had no effect. In contrast to metformin, PO Ze 450 virtually did not change maximum glucose levels during OGTT, however, prolonged elimination. Ze 450 administered PO and IP decreased significantly post-stimulated insulin, whereas metformin did not. HOMA-IR index of insulin resistance improved significantly after IP and PO Ze 450 and slightly after metformin. In summary, the results demonstrate that Ze 450 reduced significantly body weight, plasma glucose, improved glucose metabolism and insulin sensitivity in diabetic ob/ob mice. In vitro experiments suggest that part of the effects may be related to AMPK activation.

## Solubility Information

Solubility	DMSO: 6.21 mg/mL (10 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	20% Cremophor EL: 3 mg/mL (4.83 mM),Suspension. <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

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	1mg	5mg	10mg
1 mM	1.6108 mL	8.054 mL	16.108 mL
5 mM	0.3222 mL	1.6108 mL	3.2216 mL
10 mM	0.1611 mL	0.8054 mL	1.6108 mL
50 mM	0.0322 mL	0.1611 mL	0.3222 mL

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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

Antidiabetic effects of the *Cimicifuga racemosa* extract Ze 450 in vitro and in vivo in ob/ob mice. *Phytomedicine*. 2014 Sep 25;21(11):1382-9.

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