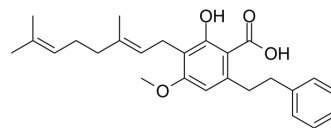


Amorfrutin B

Cat. No.:	HY-113631
CAS No.:	78916-42-4
Molecular Formula:	C ₂₆ H ₃₂ O ₄
Molecular Weight:	408.53
Target:	PPAR
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease; Vitamin D Related/Nuclear Receptor
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Amorfrutin B is a highly potent natural peroxisome proliferation-activated receptor γ (PPAR γ) agonist with oral activity with K_i values of 19 nM and EC_{50} values of 73 nM, respectively. Amorfrutin B has hypoglycemic and neuroprotective activities ^{[1][2]} .
In Vitro	Amorfrutin B (1,5 μ M, 6 h) inhibits apoptosis and autophagy by gene methylation and miRNA-dependent regulation, and protects mouse brain neurons from hypoxia/ischemia ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Amorfrutin B (100 mg/kg, added to food for 2 weeks) improves insulin sensitivity, glucose tolerance and lipid concentration in insulin-resistant mice ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	High-fat diet mice model ^[2] .
Dosage:	100 mg/kg
Administration:	Add to food \times 2 weeks
Result:	Reduced fasting plasma levels of triacylglycerols by 25% and the concentrations of deleterious plasma NEFA by 29%.

REFERENCES

[1]. Przepiórska K, et al. Amorfrutin B Protects Mouse Brain Neurons from Hypoxia/Ischemia by Inhibiting Apoptosis and Autophagy Processes Through Gene Methylation- and miRNA-Dependent Regulation. *Mol Neurobiol.* 2023 Feb;60(2):576-595.

[2]. Weidner C, et al. Amorfrutin B is an efficient natural peroxisome proliferator-activated receptor gamma (PPAR γ) agonist with potent glucose-lowering properties. *Diabetologia.* 2013 Aug;56(8):1802-12.

Caution: Product has not been fully validated for medical applications. For research use only.

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