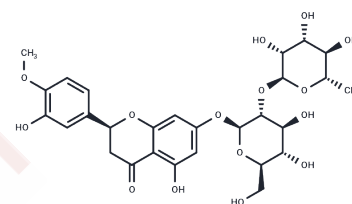


Neohesperidin

Chemical Properties

CAS No. :	13241-33-3
Formula:	C ₂₈ H ₃₄ O ₁₅
Molecular Weight:	610.56
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	Neohesperidin (NSC-31048) with antioxidant and neuroprotective properties. Unlike other citrus flavanones, it does not inhibit oral carcinogenesis in a rat model.
Targets(IC50)	Antioxidant,Wnt/beta-catenin
In vivo	Neohesperidin, administered at a dose of 50 mg/kg, significantly reduces the occurrence of HCl/ethanol-induced gastric lesions by 55.0%. In studies involving pylorus-ligated rats, this compound notably decreases both the volume of gastric secretion and gastric acid output, while simultaneously increasing gastric pH[1]. Additionally, neohesperidin treatment markedly improves glucose metabolism and insulin sensitivity in diabetic mice, evidenced by substantial reductions in fasting glucose, serum glucose, glycosylated serum protein (GSP), serum triglycerides, total cholesterol, and leptin levels, alongside a decrease in the liver index. It also enhances oral glucose tolerance and reduces insulin resistance in these mice[3].

Solubility Information

Solubility	DMSO: 100 mg/mL (163.78 mM),Sonication is recommended. H ₂ O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 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 (6.55 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	1.6378 mL	8.1892 mL	16.3784 mL
5 mM	0.3276 mL	1.6378 mL	3.2757 mL
10 mM	0.1638 mL	0.8189 mL	1.6378 mL
50 mM	0.0328 mL	0.1638 mL	0.3276 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

Lee JH, et al. *Phytother Res*, 2009, 23(12), 1748-1753.

Johnston K, et al. *FEBS Lett*, 2005, 579(7), 1653-1657.

Jia S, et al. Hypoglycemic and hypolipidemic effects of neohesperidin derived from *Citrus aurantium* L. in diabetic KK-A(y) mice. *Food Funct.* 2015 Mar;6(3):878-86.

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