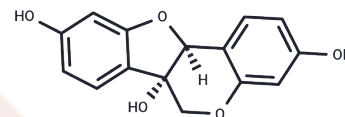


Glycinol

Chemical Properties

CAS No. :	69393-95-9
Formula:	C ₁₅ H ₁₂ O ₅
Molecular Weight:	272.25
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	Glycinol enhances osteogenic differentiation and attenuates the effects of age on mesenchymal stem cells, it could as a potential preventive or treatment for osteoporosis. Glycinol also has antidiuretic activity.
In vitro	Phytoestrogens, such as Glycinol, have recently gained significant attention as an alternative therapy for osteoporosis due to their structural similarity to estradiol and their bone-generating potential. METHODS AND RESULTS: The osteogenic effects of Glycinol were investigated in human bone marrow mesenchymal stem cells (BMSCs) derived from older (>50 years old) and younger subjects (<25 years old). BMSCs isolated from older donors demonstrated reduced osteogenesis. 17β-estradiol and Glycinol exposure rescued the age-related reduction in osteogenic differentiation of BMSCs. These results correlated with the induction of osteogenic genes and estrogen receptor-α (ER-α) following Glycinol treatment. ER antagonist studies further support that Glycinol promotes osteogenesis through ER signaling. CONCLUSIONS: The results from these studies support investigating Glycinol as a potential preventive or treatment for osteoporosis.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.6731 mL	18.3655 mL	36.7309 mL
5 mM	0.7346 mL	3.6731 mL	7.3462 mL
10 mM	0.3673 mL	1.8365 mL	3.6731 mL
50 mM	0.0735 mL	0.3673 mL	0.7346 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

Glycinol enhances osteogenic differentiation and attenuates the effects of age on mesenchymal stem cells. Regen Med. 2017 Jul;12(5):513-524.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481