Paeonoside

Cat. No.: HY-N2351

CAS No.: 20309-70-0

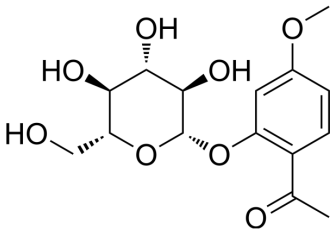
Molecular Formula: $C_{15}H_{20}O_8$

Molecular Weight: 328.31

Target: Others

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Paeonoside is a bioactive compound identified in P. suffruticosa that promotes wound healing and migration in osteoblast differentiation. Paeonoside has also been reported to have some antidiabetic activity and may prevent sepsis-induced lethality[1].

In Vitro

Paeonoside (PASI) (0.1-100 μM, 24 h) has no cytotoxic effect on pro-osteoblasts of MC3T3-E1 cells[1].
Paeonoside (PASI) (1-30 μM, 24 h) can significantly restore wound areas and promote cell migration in a dose-dependent manner during the induction of preosteoblast of MC3T3-E1 cells differentiation using osteogenic supplement (OS) medium. In parallel, PASI promotes alkaline phosphatase (ALP) staining and its activity in a dose-dependent manner[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	Pro-osteoblasts of MC3T3-E1 cells
Concentration:	1-10 μM
Incubation Time:	24 h
Result:	Increased the expression of BMP2 and Wnt3a, stimulated Smad1/5/8 phosphorylation, GSK3β phosphorylation and β-linked protein expression as well as upregulated RUNX2 expression.

REFERENCES

[1]. Kyung-Ran Park, et al. Biological Mechanisms of Paeonoside in the Differentiation of Pre-Osteoblasts and the Formation of Mineralized Nodules. Int J Mol Sci. 2021 Jun 27;22(13):6899.

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

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