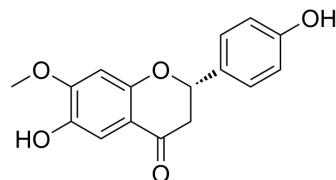


6,4'-Dihydroxy-7-methoxyflavanone

Cat. No.:	HY-N9736
CAS No.:	189689-32-5
Molecular Formula:	C ₁₆ H ₁₄ O ₅
Molecular Weight:	286.28
Target:	Calcineurin
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	6,4'-Dihydroxy-7-methoxyflavanone, a flavonoid, is a nature product that could be isolated from Heartwood Dalbergia odorifera. 6,4'-Dihydroxy-7-methoxyflavanone inhibits receptor activators of nuclear factor kappa-B ligand (RANKL) induced osteoclastogenesis. 6,4'-Dihydroxy-7-methoxyflavanone has antioxidant, anti-inflammatory and neuroprotective effects. 6,4'-Dihydroxy-7-methoxyflavanone can be used in research of osteoporosis ^[1] .								
In Vitro	<p>6,4'-Dihydroxy-7-methoxyflavanone (3-30 μM; macrophages) inhibits osteoclastogenesis and TRAP activity in a dose-dependent manner^[1].</p> <p>6,4'-Dihydroxy-7-methoxyflavanone (0-30 μM; 48 h) disrupts actin ring formation of mature osteoclasts^[1].</p> <p>6,4'-Dihydroxy-7-methoxyflavanone (0-30 μM; 1 h; macrophages) inhibits RANKL-induced expression of nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1 (NFATc1) and c-Fos via inhibition of mitogen activated protein kinases (MAPKs) pathway^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>Macrophages</td> </tr> <tr> <td>Concentration:</td> <td>0, 1, 3, 10, and 30 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>1 hours</td> </tr> <tr> <td>Result:</td> <td>Inhibited RANKL-induced phosphorylation of JNK without decrease of the phosphorylation of ERK and p38 MAPK.</td> </tr> </table>	Cell Line:	Macrophages	Concentration:	0, 1, 3, 10, and 30 μM	Incubation Time:	1 hours	Result:	Inhibited RANKL-induced phosphorylation of JNK without decrease of the phosphorylation of ERK and p38 MAPK.
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Concentration:	0, 1, 3, 10, and 30 μM								
Incubation Time:	1 hours								
Result:	Inhibited RANKL-induced phosphorylation of JNK without decrease of the phosphorylation of ERK and p38 MAPK.								

REFERENCES

[1]. Im NK, et, al. 6,4'-Dihydroxy-7-methoxyflavanone inhibits osteoclast differentiation and function. Biol Pharm Bull. 2013;36(5):796-801.

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

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