# Sugiol

**Cat. No.:** HY-N1195

**CAS No.:** 511-05-7

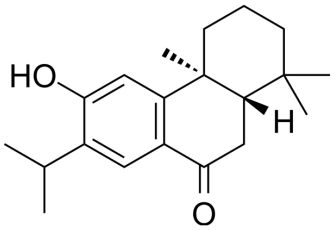
**Molecular Formula:** $C_{20}H_{28}O_2$

**Molecular Weight:** 300.44

**Target:** p38 MAPK; ERK; JNK; Interleukin Related; TNF Receptor

**Pathway:** MAPK/ERK Pathway; Stem Cell/Wnt; Immunology/Inflammation; Apoptosis

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




## BIOLOGICAL ACTIVITY

**Description**

Sugiol is an abietane diterpenoid, can be isolated from Calocedrus formosana bark. Sugiol has anti-inflammatory activity, could effectively reduce intracellular reactive oxygen species (ROS) production in lipopolysaccharide (LPS)-stimulated macrophages[1].

**$IC_{50}$ & Target**

| | | | |
|---|---|---|---|
| ERK1 | ERK2 | p38 MAPK | JNK1 |
| JNK2 | IL-1β | | |

**In Vitro**

Sugiol (5-30 μM; 30 min) inhibits TNF-α and proIL-1β/IL-1β protein production in J774A.1 cells[1].
Sugiol (5-30 μM; 30 min) inhibits MAPK activation, suppresses ERK1/2, JUNK1/2, and p38 phosphorylation in LPS-induced J774A.1 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

| | |
|---|---|
| Cell Line: | J774A.1 macrophages cells stimulated with LPS |
| Concentration: | 5 μM, 10 μM, 20 μM, and 30 μM |
| Incubation Time: | 30 min |
| Result: | Completely inhibited ERK1/2 phosphorylation at 30 μM, and effectively inhibited JNK1/2 and p38 phosphorylation. |

## REFERENCES

[1]. Chao KP, et al. Anti-inflammatory activity of sugiol, a diterpene isolated from Calocedrus formosana bark. Planta Med. 2005 Apr;71(4):300-5.

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

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