## **Product** Data Sheet

## Chloranthalactone B

Cat. No.: HY-N10913 CAS No.: 66395-03-7Molecular Formula:  $C_{15}H_{16}O_3$ Molecular Weight: 244.29

Target: AP-1; p38 MAPK; NO Synthase; TNF Receptor; COX; Interleukin Related

Pathway: Immunology/Inflammation; MAPK/ERK Pathway; Apoptosis

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description Chloranthalactone B, a lindenane-type sesquiterpenoid, is a nature product that could be isolated from Chinese medicinal herb Sarcandra glabra. Chloranthalactone B inhibits the production of inflammatory mediators by inhibiting the AP-1 and p38 MAPK pathways<sup>[1]</sup>.

In Vitro Chloranthalactone B (6.25-50  $\mu$ M; 30 min) has anti-inflammatory effects in LPS-stimulated RAW264.7 cells and inhibits NO production<sup>[1]</sup>.

Chloranthalactone B (25 and 50  $\mu$ M; 30 min) inhibits inducible nitric oxide synthase (iNOS), cyclooxygenase-2 (COX-2), tumor necrosis factor  $\alpha$  (TNF- $\alpha$ ), and interleukin-1 $\beta$  (IL-1 $\beta$ ) expression in LPS-treated RAW264.7 cells<sup>[1]</sup>.

Chloranthalactone B (25 and 50  $\mu$ M; RAW264.7 cells) inhibits LPS-induced AP-1 activation in a concentration-dependent manner [1].

Chloranthalactone B (25 and 50  $\mu$ M; 30 min; RAW264.7 cells) inhibits the phosphorylation of ERK, JNK, and p38 in RAW264.7 cells [1].

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

Western Blot Analysis<sup>[1]</sup>

Cell Line:	RAW264.7 cells
Concentration:	25 and 50 μM
Incubation Time:	30 min
Result:	Inhibited the expression of iNOS, TNF- $\alpha$ , COX-2, and IL-1 $\beta$ in a dose-dependent manner. Inhibited the phosphorylation of ERK, JNK, and p38 in RAW264.7 cells.

## **REFERENCES**

 $[1].\ Li\ X,\ et,\ al.\ Anti-Inflammatory\ Effects\ of\ Chloranthalactone\ B\ in\ LPS-Stimulated\ RAW264.7\ Cells.\ Int\ J\ Mol\ Sci.\ 2016\ Nov\ 22;17(11):1938.$ 

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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