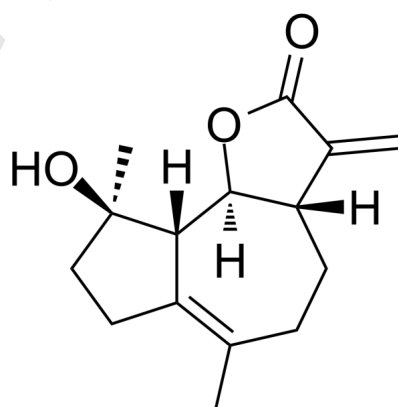


Certificate of Analysis

Catalog Number	BP15139
Product Name	Micheliolide

Physical and Chemical Properties

CAS No.	68370-47-8
Chemical Formula	C ₁₅ H ₂₀ O ₃
Molecular Weight	248.322
Solubility	DMSO: 49 mg/mL (197.32 mM)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

Product Information

Description	Micheliolide(MCL) is a sesquiterpene lactone which inhibits various inflammatory response.
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In vitro	<p>Treatment of BV2 cells with Micheliolide(MCL) significantly repressed LPS-stimulated nitric oxide synthase (iNOS) and cyclooxygenase-2 (COX-2) expression, as well as tumor necrosis factor-α (TNF-α), interleukin-6 (IL-6) and nitric oxide (NO) induction. MCL also attenuated mRNA levels of multiple pro-inflammatory cytokines and mediators such as iNOS, COX-2, TNF-α, IL-6 and IL-1β. Mechanistic studies revealed that MCL suppressed LPS-stimulated the activation of IκBα/NF-κB pathway and Akt pathway. Moreover, MCL inhibited LPS-induced the activation of c-Jun N-terminal kinase (JNK), p38 MAPK kinase, and extracellular signal-regulated kinases 1/2 (ERK1/2). Meanwhile, MCL markedly promoted antioxidant protein heme oxygenase-1 (HO-1) expression by enhancing NF-E2-related factor 2 (Nrf2) activity. Together, MCL may serve as a neuroprotective agent in neuroinflammation-related neurodegenerative disorders.</p>
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Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	<p>Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.</p>

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