

Data Sheet

Product Information

	PP45400
Catalog Number	BP15139
Product Name	Micheliolide
Description	Micheliolide(MCL) is a sesquiterpene lactone which inhibits various inflammatory response.
In vitro	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-alpha (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 activition 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.
CAS No.	68370-47-8
Chemical Formula	C15H20O3
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	O H H H
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