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Moracin M inhibits airway inflammation by interrupting the JNK/c-Jun and NF- κ B pathways *in vitro* and *in vivo*

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ABSTRACT

The therapeutic effectiveness of moracins as 2-arylbenzofuran derivatives against airway inflammation was examined. Moracin M, O, and R were isolated from the root barks of *Morus alba*, and they inhibited interleukin (IL)-6 production from IL-1 β -treated lung epithelial cells (A549) at 10 - 100 μ M. Among them, moracin M showed the strongest inhibitory effect (IC₅₀ = 8.1 μ M). Downregulation of IL-6 expression by moracin M was mediated by interrupting the c-Jun N-terminal kinase (JNK)/c-Jun pathway. Moracin derivatives inhibited inducible nitric oxide synthase (iNOS)-catalyzed NO production from

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