

Inotilone and related phenylpropanoid polyketides from *Inonotus* sp. and their identification as potent COX and XO inhibitors

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Abstract: By bioassay-guided isolation, phenylpropanoid-derived polyketides, including an unusual 5-methyl-3(2H)-furanone derivative (inotilone) with potent cyclooxygenase (COX) and xanthone oxidase (XO) inhibitory activities were obtained from the fruiting body of the mushroom *Inonotus* sp. © The Royal Society of Chemistry 2006.

Index Keywords: Derivatives; Enzyme inhibition; Metabolites; Polymers; Cyclooxygenase (COX); Inhibitory activities; Polyketides; Xanthone oxidase (XO); Bioassay; enzyme inhibitor; furan derivative; inotilone; macrolide; phenylpropionic acid derivative; prostaglandin synthase inhibitor; xanthine oxidase; article; Basidiomycetes; chemistry; drug antagonism; ion exchange chromatography; isolation and purification; methodology; spectroscopy; Basidiomycota; Chromatography, Ion Exchange; Cyclooxygenase Inhibitors; Enzyme Inhibitors; Furans; Macrolides; Phenylpropionates; Spectrum Analysis; Xanthine Oxidase; Basidiomycota; *Inonotus*

Year: 2006

Source title: Organic and Biomolecular Chemistry

Volume: 4

Issue: 13

Page : 2545-2548

Cited by: 12

Link: [Scopus Link](#)

Chemicals/CAS: xanthine oxidase, 9002-17-9; Cyclooxygenase Inhibitors; Enzyme Inhibitors; Furans; inotilone; Macrolides; Phenylpropionates; Xanthine Oxidase, EC 1.1.3.22

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ISSN: 14770520

DOI: 10.1039/b604505g

PubMed ID: 16791316

Language of Original Document: English

Abbreviated Source Title: Organic and Biomolecular Chemistry

Document Type: Article

Source: Scopus

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